REPORT RESUMES

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THE TWO-YEAR COLLEGE IN VIRGINIA.

BY- BRUMBAUGH, A.J.

VIRGINIA STATE COUNCIL OF HIGHER EDUC., RICHMOND

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FOLLOWING A REVIEW OF THE STATUS OF POST-HIGH SCHOOL EDUCATION, A COMMITTEE OF THE HIGHER EDUCATION STUDY COMMISSION RECOMMENDED (1) A STATEWIDE SYSTEM OF COMPREHENSIVE COMMUNITY COLLEGES, COORDINATED WITH OTHER SEGMENTS OF HIGHER EDUCATION, (2) A BOARD OF COMMUNITY COLLEGES AND TECHNICAL EDUCATION, TO OPERATE UNDER THE STATE COUNCIL OF HIGHER EDUCATION IN DEVELOPMENT OF A STATEWIDE PLAN, FORMULATION OF POLICIES, AND DETERMINATION OF FINANCIAL NEEDS, (3) TRANSFER OF 2-YEAR BRANCHES OF SENIOR INSTITUTIONS TO THE NEW BOARD, (4) DEVELOPMENT OF CRITERIA FOR THE ESTABLISHMENT OF 2-YEAR POST-HIGH SCHOOL INSTITUTIONS, (5) LOCAL BOARDS OR ADVISORY COMMITTEES FOR EACH INSTITUTION, (6) EFFECTIVE ARTICULATION, AND (7) POLICIES AND REGULATIONS TO PROTECT AND PRESERVE THE IDENTITY OF THE 2-YEAR COLLEGE. RECOMMENDED CRITERIA FOR ESTABLISHMENT OF 2-YEAR COLLEGES INCLUDE (1) MINIMUM POTENTIAL ENROLLMENT OF 400 STUDENTS, (2) STRONG LOCAL INTEREST IN THE COLLEGE, (3) ASSURANCE OF ADEQUATE FINANCIAL SUPPORT FOR CAPITAL OUTLAY AND OPERATING COSTS, AND (4) ACCESSIBILITY. (WO)

ERIC

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THE TWO-YEAR COLLEGE IN VIRGINIA

Staff Report #4

VIRGINIA HIGHER EDUCATION STUDY COMMISSION

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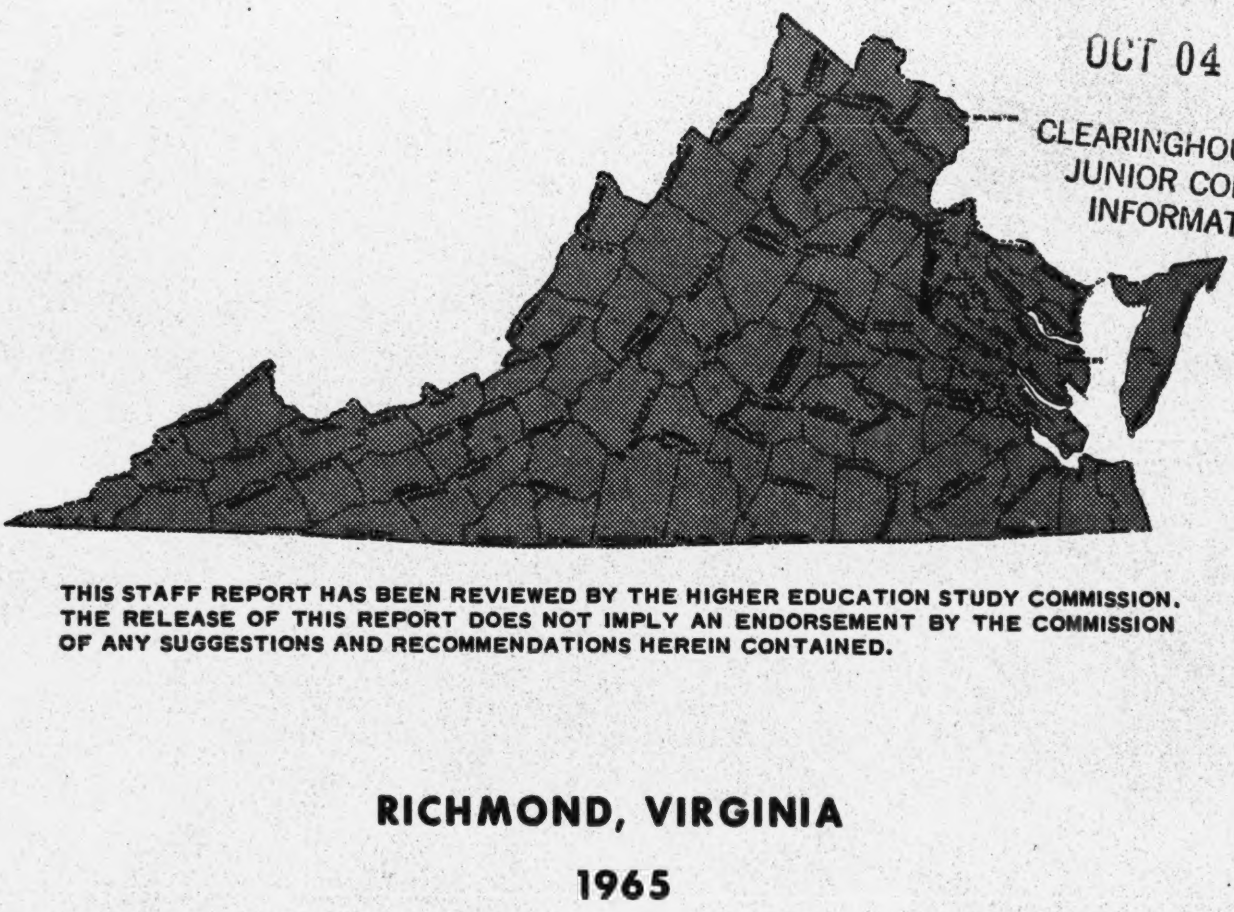

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RICHMOND, VIRGINIA

1965

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#1. Prospective College-age Population in Virginia, by Subregion 1960-1985
Lorin Thompson

#2. State-wide Pattern of Higher Education in Virginia
James R. Connor

#3. Geographical Origins of Students Attending College in Virginia
John Dale Russell

#4. The Two-year College in Virginia
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Staff Report #4

THE TWO-YEAR COLLEGE IN VIRGINIA

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Southern Regional Education Board

THIS STAFF REPORT HAS BEEN REVIEWED BY THE HIGHER EDUCATION STUDY COMMISSION. THE RELEASE OF THIS REPORT DOES NOT IMPLY AN ENDORSEMENT BY THE COMMISSION OF ANY SUGGESTIONS AND RECOMMENDATIONS HEREIN CONTAINED.

RICHMOND, VIRGINIA
1965

FOREWORD

The Virginia General Assembly in 1964, under Senate Joint Resolution No. 30, authorized the Governor to appoint a Commission on Higher Education, and directed the Commission ". . . to undertake a comprehensive study and review of higher education, to be used as a basis for effective long range planning as to objectives, needs, and resources of public and private higher education in the Commonwealth of Virginia." The members appointed to the Commission are listed on the title page of this volume. The Commission selected a staff for carrying on the Study and approved an outline of the topics to be covered. Several of these topics required the collection and interpretation of extensive data; the detailed analyses of the problems led, in many cases, to suggestions for their solution. The results of these detailed studies, prepared by staff members and consultants, are published as Staff Reports, to make the information generally available.

Staff Report #4, published herewith, treats the problem of the two-year college in Virginia. This problem was specifically recognized in Senate Joint Resolution No. 30, which directed the Commission to recommend procedures for developing a ". . . state-wide system of comprehensive community colleges which offer post-high school education for terminal vocational and technical training, and for college-transfer programs of not more than two years duration."

In order to deal adequately with the problem of the two-year college in Virginia, the Commission turned for assistance to the Southern Regional Education Board, an agency created by an interstate compact in which sixteen states, including Virginia, have joined for mutual service on educational affairs. The Southern Regional Education Board assigned to this Virginia project two of its principal staff members, Dr. A. J. Brumbaugh and Dr. James L. Miller, Jr. Staff Report #4, "The Two-year College in Virginia," has been prepared by Dr. Brumbaugh, with the assistance of other members of the Commission's staff. The cooperation of the Southern Regional Education Board, in making available the services of Dr. Brumbaugh and Dr. Miller, is gratefully acknowledged.

In accordance with the directive in Senate Joint Resolution No. 30, the study of the two-year college in Virginia has included both those under public control and those under private control. All the two-year colleges in Virginia were sent a rather comprehensive information schedule, specially prepared for the reporting of data about their programs and facilities. All responded with complete information. Other data were collected from the two-year colleges in accordance with the general pattern through which information was sought for the Study from all institutions of higher education in Virginia. Other sources of information concerning the two-year colleges were used, such as their published catalogs and reports, and data on file with the State Council of Higher Education

In addition to the collection of information, as described above, each two-year college in Virginia was visited by one or more members of the Commission's staff. Mr. R. Jan LeCroy, Research Associate, visited each two-year college, both those under state and those under private control. Mr. LeCroy has also been responsible for the tabulation of most of the data appearing in this Report. The Director of the Study, John Dale Russell, visited four of the state-controlled two-year colleges, representing each of the three parent institutions that operate two-year colleges as branches. Dr. James L. Miller, Jr. visited three of the state-controlled two-year colleges, also one from each of the three parent institutions. During the visits to the institutions an interview schedule was used to guide the discussion and to permit the recording of further information and points of view that were expressed. In the case of one of the parent institutions no representative of the central administrative staff was present during the visits to its branches, and there has thus been no opportunity for a central review of the data recorded on the interview form.

Thanks are due to the personnel of the two-year colleges in Virginia for the diligence and care with which information has been supplied and for the courtesies extended the staff members of the Commission during their visits.

The importance of the problem of the two-year college in Virginia led to the appointment of a special Committee of the Higher Education Study Commission for the oversight of this part of the Study. This

Committee initially reviewed the plans prepared by Dr. Brumbaugh and his proposed outline for the Report. The Committee also reviewed a preliminary draft of the Staff Report #4, and made suggestions that have been helpful in putting the Report into its final form.

Dr. Brumbaugh, in preparing Staff Report #4, has presented his summary and recommendations as Chapter I. In the interest of brevity, most of the supporting evidence for the findings has been omitted from Chapter I. The reader who can give only a short time to the reading of the Study may want to read Chapter I only. If one has time to read the entire Report, it is suggested that he begin with Chapter II, and then read the summary in Chapter I at the last.

The text of Staff Report #4 presents only the findings and interpretations of the author, Dr. Brumbaugh. The Report has been reviewed by the Higher Education Study Commission but the release of the Report does not imply an endorsement by the Commission of any suggestions and recommendations herein contained.

John Dale Russell
Director of the Study

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THE TWO-YEAR COLLEGE IN VIRGINIA

Author's Introduction

Virginia, like many other states, must provide appropriate opportunities for education beyond the high school for a rapidly growing segment of its population. Conservative estimates indicate that the college-age population in Virginia will increase from 217,000 in 1960 to 323,000 in 1970, and to 368,000 in 1980. From this reservoir of potential post-high school students will come approximately 120,000 students in 1970 and more than 180,000 by 1980, to be educated in the colleges and universities of the State. Specifically, how will Virginia provide opportunities and facilities for these students?

To find an answer to this question, various possibilities must be explored. One of these is the expansion of existing two-year colleges and the establishment of new two-year community colleges in strategic centers. For the purpose of investigating this possibility and of making appropriate recommendations, a Committee of the Commission on Higher Education and a Task Force cooperating with the Committee was asked to make a special study of the need for two-year comprehensive community colleges.

The procedures followed in making the Study and in preparing the Report in brief were:

1. A proposed outline of the scope and content of the Study was presented to the Director of the state-wide Study of Higher Education and to the Committee of the Commission for review and comment.

This outline as finally approved by those concerned has provided a working basis for the Study.

2. A schedule of information needed for the Study was developed in cooperation with the Director and his staff.
3. Data called for were tabulated and summarized by the Staff of the Commission. Data were also supplied by the Staff of the Board of Technical Education, by the Staff of the Southern Regional Education Board, and by other agencies.
4. For the purpose of verifying data and of securing additional information and points of view, each of the two-year colleges, public and private, was visited at least once by one or more staff members of the Commission and/or by a representative of the Task Force.

   a. The Director of the Commission's Study and staff members of the Task Force on Community Junior Colleges met with the presidents of the three state institutions that operate branches for the purpose of discussing issues relating to the future role of the two-year branches. The conference was particularly helpful in delimiting various considerations that would have to be taken into account in the establishment of a state-wide system of community junior colleges.
5. A draft of the Report based on data provided by the Commission's

staff and on information derived from institutional visitations was prepared by the Director of the Task Force for review and comment by the Commission's Director and his staff, by the Committee of the Commission, and by consultants.

6. A final draft of this Report, incorporating relevant suggestions derived from the preliminary review, was submitted to the Commission.

While numerous persons were helpful in outlining and preparing the Report, special credit must be given to Dr. James L. Miller, Jr., Associate Director for Research of the Southern Regional Education Board, for assistance he gave in many ways, but most importantly in reading critically the Report in the successive stages of its preparation. Special credit should also be given to Mr. R. Jan LeCroy, Research Associate on the Commission staff, for summarizing data secured from the two-year colleges, public and private, for visiting each of these two-year colleges, and for preparing preliminary drafts of several sections of the Report.

The Report presents a summary of findings, conclusions and recommendations followed by a consideration of (1) the role of two-year community colleges, (2) factors affecting the establishment of two-year community colleges, (3) an analysis of present opportunities for education beyond the high school, (4) problems and policies in organizing and maintaining an adequate "state-wide system of comprehensive community colleges" and (5) a consideration of plans and procedures for the organization and administration of a coordinated system of two-year post-high school colleges and estimates of costs.

CHAPTER I

RECOMMENDATIONS AND RATIONALE

Future developments of higher education in Virginia are affected by a number of factors. Among these factors are: the growth and shifts in the population of the State; the size and geographical location of the college-age segment of the population; economic developments and changes in the State; the number, type, and capacity of institutions currently in operation and the need for new types of institutions to supplement those already in existence. This Study is concerned with the need for two-year community colleges and a proposed plan for their establishment and effective operation. The overview presented in this Chapter summarizes the most important recommendations derived from the Study and presents briefly the assumptions and findings on which the recommendations are based.

Recommendations

It is recommended that:

1. The development of a state-wide system of comprehensive community colleges be encouraged and promoted, and the system of community colleges be coordinated with the remainder of the publicly controlled program of higher education in Virginia through the State Council of Higher Education.

2. Operating under the policies of the State Council of Higher Education, a single board at the state level--to be known as the Board of Community Colleges and Technical Education--be responsible for the establishment, control, and government of all publicly supported two-year post-high school institutions.
3. The State Board of Technical Education be reconstituted as the Board of Community Colleges and Technical Education and its membership be increased to a total of twelve. The membership should be fully representative of the broadened functions allocated to it. Members of boards or employees of Virginia institutions of higher education, public or private, should not be eligible for appointment to this Board.
4. The major functions of this Board be: to determine the need for two-year post-high school instituions; to develop a statewide plan for their location and a time schedule for their establishment; to formulate policies pertaining to their establishment and operation; to have general oversight of their operation; to determine financial needs and prepare budget requests; and to perform such other functions as may be necessary to assure educational services of high quality and effective and economical institutional operation. The Board should allow to each institution a maximum degree of autonomy

in local operations consistant with the effective coordination of all institutions under the Board's jurisdiction.

5. Steps be taken as soon as feasible to transfer the two-year branches of the State higher institutions, the post-high school area-vocational school programs, and the two-year technical colleges to the Community College and Technical Education Board.

6. The Community College and Technical Education Board adopt criteria for the establishment of new two-year post-high school institutions and develop a state-wide plan for the establishment of new publicly supported two-year institutions, delimiting the geographical areas to be served and setting a time schedule for their establishment. In the discharge of this function the new Board should take into account criteria and plans that have already been established by the State Board of Technical Education.

7. During a transition period, perhaps the next biennium or longer if necessary, flexible policies be employed relating to such matters as admission, fees, and program expansion with a view to arriving ultimately at policies and procedures that will be equitable and consistent for all two-year institutions.

8. The Community College and Technical Education Board provide in its policies and regulations for a local board or advisory

committee for each instituion to aid in identifying local educational needs, to enlist the support of the community, to advise the administration on community relations and services, and to perform such other services as may properly fall within its sphere of activity.

9. The State Council of Higher Education promote effective articulation between the community colleges and the senior institutions, public and private, possibly by arranging for the appointment of a joint committee to promote cooperation in such matters as the transfer of students from community colleges to senior colleges; the mutual use of examinations or other measures of achievement; interchange of instruction and services; and other matters of common concern.

10. Policies and regulations be adopted whereby the identity of the two-year community college is protected and preserved.

    Where the need for educational programs above the level of the community college may be demonstrated in the future a separate institution should be established. A new senior college might provide a program covering the full range of offerings from the freshman to the senior year, or it might offer only an upper level program covering the junior and senior years, and possible graduate courses leading to the master's degree.

11. The Commission on Higher Education in collaboration with the State Board of Technical Education proceed immediately to prepare plans for the orderly transfer of the institutions concerned and to prepare budget estimates for the next session of the legislature. Much of the success of the proposed reorganization and development will depend on adequate financing.

Major Premises

The foregoing recommendations are supported by certain premises and justifications that are briefly summarized here, but are presented in greater detail in the following sections of this Report. Three major premises that provide guidelines for this Report are:

1. Appropriate educational opportunities must be available to all who seek them and can profit by them.
2. Individuals differ widely in the range of their abilities, interests, and ambitions. To provide the same educational experience for all does not thereby provide an "equal opportunity." Both the variations among individuals and the needs of society require widely diversified kinds of education.
3. Within the context of providing for a wide range of individual and social needs, the demands of excellence must be recognized. Excellence should be judged not by comparison with prestigious institutions, but by the quality of education related to the purposes it is designed to serve.

Background Information

If these premises are given full expression in the development of provisions for post-high school education in Virginia, the following facts must be considered.

1. During the period 1950-1964, the population of Virginia rose from 3,318,680 to 4,378,000--an increase of 31.9 per cent. During the same period the population of the entire United States increased 27 per cent, while in the Southern region the corresponding increase was 24.5 per cent. In 1950, 47 per cent of Virginia's population was urban; in 1964, 55.6 per cent was urban. Furthermore, in 1964 over half of Virginia's population was concentrated in six metropolitan areas.

   The distribution of the college-age segment of the population (18-21) conforms closely to the pattern of the concentration of the total population. Conservative estimates indicate that the college-age group will number 272,000 in 1965, 323,000 in 1970, 351,000 in 1975, and 368,000 in 1980. In 1964, total enrollments in Virginia institutions of higher education were equal to 30.2 per cent of the college-age population. It is estimated that between 1964 and 1970 the total enrollment in Virginia state-controlled and privately controlled colleges will increase from 78,000 to 120,000. This means that within a six-year period, Virginia must provide for 42,000 additional students. If trends in Virginia follow the trends in the Southern states, at least 31,000 of this total will enroll in state-controlled institutions in 1970. This means that during a six-year period public higher education in Virginia will have to expand to accommodate more students than the total increase in the numbers enrolled in these institutions during the preceding 14 years--1950-1964. Moreover, if the State established a system of comprehensive two-year community colleges and if enrollment trends in Virginia in these colleges conform to the national trend, it may be anticipated that the community colleges will enroll about 15 per cent of the total 120,000 or about 18,000 in 1970.

2. Basic changes in the economy of Virginia reflected in the employment pattern of the State have important implications for a post-high school education, particularly of the kind that can be provided in two-year community colleges. Some of the implications of these changes are:

    --Technological advances in manufacturing will require an increasing number of technical and professional workers. The annual demand for technicians in manufacturing to 1970 will be 9,700; currently about 2,100 are trained annually.

    --There is likewise a growing demand for technicians in health services, data processing, and other fields. This demand is intensified by the increasing number of federal employees--civilian and military--who live in Virginia. Federal activities account for 18 per cent of Virginia's labor force and 25 per cent of the wages and salaries paid in the State.

--The urbanization of the population of Virginia gives rise to a substantial increase in the need for health, administrative, engineering, and other types of professional personnel.

--The decline in farm employment arising from the mechanization of farming means that persons who continue to engage in farming should have at least a high school education and preferably some college preparation.

3. Two-year post-high school programs currently in operation in Virginia.

Two-Year Branches of State Higher Institutions

The 11 state-controlled two-year colleges in Virginia are all affiliated with parent institutions--five with the University of Virginia, four with Virginia Polytechnic Institute, two with The College of William and Mary.

There are marked differences in the degree of control exercised by the parent institutions and in plans of organization and administration of the two-year branch colleges. Under these conditions, there is no state-wide system of two-year publicly supported colleges.

The total enrollment in these two-year colleges in the fall of 1964 was 3,314. About 75 per cent of these students came from within a narrow radius around the colleges.

The total enrollment in the two-year colleges, public and private, (7,978) was 10.2 per cent of the total 78,041 students attending colleges in Virginia. Nationally, 14.3 per cent of all college students are enrolled in junior colleges.

That the enrollments in the two-year branches are less than might be expected or desired may be attributed in part at least to the fact that the programs are restricted and are academic in character. Present efforts to establish a system of technical colleges throughout the State indicate an awakening to needs for trained personnel at levels below the bachelor's degree that do not come within the programs or interests of most of the two-year branches.

The faculties of the two-year branches are relatively inexperienced and of limited periods of service in the branches with which they are connected. This may not be a disadvantage if adequate direction and coordination within the branches are provided. There is a disadvantage, however, in the fact that these faculty members are oriented to the parent institution and that, therefore, they identify themselves less completely with the branches than would be desirable.

The libraries in most of the state-controlled two-year branches have limited collections of books and little circulation. Generally, they need the services of professional librarians.

The Privately Controlled Junior Colleges

The 12 junior colleges in Virginia operating under private auspices have rendered an important educational service to the State. In the fall of 1964 they enrolled 4,664 students. Slightly more than half of these students came from Virginia. The programs of the privately controlled two-year colleges are broader than those of the two-year branches in that they include more courses in art, speech, drama, home economics, secretarial studies, and physical education.

The faculties of the privately controlled two-year colleges are more experienced than those of the branches and their average term of service in their respective institutions is longer. In library resources and some facilities, particularly those for physical education, these institutions also excel the publicly supported two-year branches.

Projected plans for the privately controlled two-year colleges show that these colleges expect to accommodate a decreasing percentage of the total number of college students in future years. This means that a correspondingly larger responsibility for accommodating the increasing number of college students will fall upon the state-controlled institutions.

Area Vocational-Technical Schools.

Nine area vocational-technical schools currently operate under the State Board of Education. In some of the schools, such as Danville Technical Institute, a majority of those enrolled are high school graduates. In others, such as Wise County Vocational-Technical School, most of the students are in programs at the high school level. Insofar as these schools expand at the post-high school level, they must be taken into account in developing plans for a state system of comprehensive community colleges.

Technical Colleges to be Established in Virginia

In 1964, the Virginia General Assembly established a Department of Technical Education. A nine-member Board of Technical Education appointed by the Governor is responsible for administering the activities of the Department.

Plans for the Department envision the establishment of a system of technical colleges that will bring opportunities for post-high school technical education to every section of the State. The programs of the technical colleges will vary according to community needs but generally they will be designed for technicians, employed adults, students seeking college credit, and craftsmen. Plans are well underway for the early establishment of some of these colleges. It is anticipated that technical colleges to serve all areas of the State will be established during the next three biennia. The concept of technical colleges expressed by the Board of Technical Education corresponds so closely to the concept of the comprehensive community college presented in this Report, that it is quite inconceivable that a separate system of technical colleges and of comprehensive community colleges should be developed in the State.

Implications of the Findings in this Study

The foregoing facts bring into focus the needs of Virginia for post-high school education below the level of the bachelor's degree and the major issues on which decisions must be made immediately. These needs and issues briefly stated are:

--Opportunities for post-high school education in the State must be expanded enormously during the next two decades.

--Diversified educational programs must be provided both to meet the manpower needs of the State and to make available appropriate opportunities for students of widely divergent interests and abilities.

--Future developments in post-high school education must be systematically planned in order to provide quality education most economically. In anticipation of what lies ahead, Virginia must use every safeguard in its command to avoid wasteful duplication.

--The two-year branches of state-controlled colleges and universities must be modified in purpose, programs, and control if they are to become an integral part of the state system of comprehensive community colleges.

--All the evidence available supports the conclusion that additional two-year community colleges and two-year technical colleges must be established.

--New institutions and new programs that will supplement those already in operation must be so located as to afford easy access for the maximum number of high school graduates.

--The essential developments of post-high school education will require a larger expenditure per capita than has been made heretofore.

--There must be formulated a plan for the coordinated development and control of two-year post-high school programs of all types. Present arrangements do not serve this purpose. There is no coordinated planning or control among the branches except in a very broad sense through approvals given by the State Council of Higher Education. It is important, moreover, that the technical colleges and the area vocational schools that offer programs beyond the high school be combined into a unified and coordinated system under a single state agency.

The recommendations made at the beginning of this section are designed to acheve this purpose.

Guidelines for Planning

Several criteria must be employed by the proposed Board of Community Colleges and Technical Education to determine the number of new two-year community colleges required and their locations. Of primary importance are the following:

--There should be a minimum potential enrollment of 400 students when the college becomes fully operative. Consideration should also be given to the possibility that existing institutions in an area can provide appropriate educational programs.

--The local community should indicate a strong interest in the establishment of a two-year community college. This interest may be expressed in a number of ways, for example, indications of interest by responsible local groups; a community survey to identify needs and resources; a formal application by a community council or other appropriate body; a proffer of a site;

and other financial support.

--Adequate financial support for capital outlay and operating costs should be assured. These costs vary considerably from one state to another and from one area to another within the state. They will also be affected by the type of construction required by geographical and climatic conditions. Experience of other states indicates that construction costs may be about $3,000 to $3,500 per student and that operating costs may range from the minimum of $500 to more than $800 per student, depending on the size of the college and the nature of the programs offered. Technical programs tend to be more costly than academic programs. In any event, in the Virginia situation estimates of total cost should be based upon a top level rather than a low figure.

--A community college must be reasonably accessible to those for whom it is designed. Accessibility may be defined in terms of a maximum commuting distance, ordinarily a radius of 25-30 miles, or in terms of maximum driving time, 45 minutes to one hour. Accessibility thus defined is based on the assumption that no dormitory accommodations will be provided. In sparsely populated areas where the community served extends beyond the possible commuting radius, some provisions for housing students may have to be made.

Further plans concerning location of two-year colleges in Virginia should be developed in collaboration with the Board of Technical Education.

Further plans concerning budgetary requirements for the development of a program of comprehensive community colleges should also be developed in collaboration with the Board of Technical Education. These plans will take into account funds currently budgeted for the separate branches, funds allocated to the Board of Technical Education, and funds available for the area vocational-technical schools. It is beyond the scope of this Study to make such detailed financial analyses.

Conclusion

The Commonwealth of Virginia is at the crossroads in planning for higher education adequate for the years ahead. It can continue to allow higher education to expand in an uncoordinated fashion, thereby permitting unnecessary and costly duplication to develop in some areas and needs to continue to be unfulfilled in others. The alternative course is to systematize and coordinate the provisions for post-high school education so that opportunities may be available as widely as possible for each individual to develop to the fullest of his potentialities. Wisdom would dictate the latter course of procedure. But to follow this course will require that political considerations and vested institutional interests be subordinated to the broader interests of youth, the State's most valuable asset.

The recommendations presented in this Report are made in the best interest both of the youth of Virginia and the future welfare of the Commonwealth.

CHAPTER II

THE ROLE OF TWO-YEAR COLLEGES

Higher education derives its justification from the society it serves. It must, therefore, be responsive to changing needs of that society. It is not enough, however, that the educated citizen "adjust" to these changes; he must be creatively imaginative in evaluating and promoting change; he must be constructively influential in directing change. The course of society in a democracy is determined by the wisdom of its citizens.

This point of view, generally accepted by the American people, has been expressed in practical terms by increasing the educational level of the citizens through new and diversified kinds of post-high school education. The guiding principles that have emerged in response to individual and social needs briefly stated are:

1. Appropriate educational opportunities must be available to all who seek them and can profit by them.
2. Individuals differ widely in the range of their abilities, interests, and ambitions. To provide the same educational experience for all does not thereby provide "equal opportunity." Both the variations among individuals and the needs of society require widely diversified kinds of education.
3. Within the context of providing for a wide range of individual and social needs, the demands of excellence must be recognized.

> Excellence should be interpreted not by comparisons with prestigious institutions, but in terms of the quality of education related to the purposes it is designed to serve.

In response to this philosophy the most rapidly growing segment of higher education in some states is the community junior college. Nationally the number of public two-year community colleges increased from 294 in 1950 to 381 in 1963. In the Southern states (members of the Southern Regional Education Board) the increase during the same period was from 84 to 117. Even more impressive was the growth in enrollments during the same period; nationally from 168, 043 to 553, 302; in the Southern states from 33, 802 to 109, 578. The most phenomenal growth occurred in Florida where 957 students were enrolled in junior colleges in 1950 and 38, 152 in 1963. The 1963 community college enrollment in that state was 53. 3 per cent of the enrollment in all public higher institutions. Enrollments, full-time and part-time, in the two-year public colleges in Virginia in 1964 were 3, 314, or only 6 per cent of the total enrollment in all public higher institutions. The greatest gains in junior college growth have occurred in states where the philosophy of the community junior college has been generally accepted and where state-wide plans for the coordinated development of post-high school education have been adopted.

The importance of the community junior college was stated quite emphatically by the Commission on Goals for Higher Education in the South, headed by a former Governor of Virginia, Colgate W. Darden, Jr. It said, "Each state should develop a strong system of two-year community colleges. These non-residential institutions, generally located in urban areas, can serve a variety of functions for which four-year institutions are not required. Among these are freshman and sophomore college courses, vocational and technical programs, guidance and counseling services, specific programs to meet the community needs and adult education. . . . The community college is economical for both student and taxpayer. It can be responsive to local needs and a vital force in a community."[1]

Even though the two-year community college is a well-established unit within the American concept of higher education, there are still some professors and administrators in liberal arts colleges and universities who fail to recognize the distinctive role of this comparative newcomer to the American educational scene. That attitude is reflected, on the one hand, in regarding transfer students from junior colleges as less able and less well-prepared than native campus students, a conclusion that is not justified by the academic records of transfer students; and, on the other hand, in pressures on behalf of the two-year community colleges to become four-year degree-granting institutions.

The true community junior college must be a multi-purpose institution. It must offer college parallel courses for those who will continue beyond the community college level. It must provide terminal courses, both general and technical; and it must provide an appropriate program for adults. Insofar as it incorporates vocational-technical education, it tends to duplicate the programs of the two-year technical colleges. The result is that in some states two separate and competing systems of post-high school vocational-technical education have developed, or are in the process of developing. Virginia is face to face with the possibility of such a duplication and competition. Fortunately, the staff of the State Board of Technical Education recognizes the undesirability of such a situation and is concerned that its plans for new technical colleges be coordinated with those that are developed for new community junior colleges.

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[1] Southern Regional Education Board, Within Our Reach, Report of the Commission on Goals for Higher Education in the South, Atlanta, 1961, p. 16.

A comprehensive community college has a distinctive role to play in a state system of higher education. The degree-granting college or university serves very different purposes. If a comprehensive community college is given four-year degree-granting status, it inevitably tends to discontinue its distinctive community service. For this reason, states with long experience in community college operation have adopted policies that prevent the comprehensive community college from developing into a four-year degree-granting institution. If, in a community where a comprehensive community college already exists, the need is demonstrated for a four-year degree-granting institution, this need should be met by establishing a new institution, either one that offers a complete undergraduate degree program, or one that offers exclusively advanced courses--junior, senior, and graduate--relying on community colleges to provide freshman and sophomore courses. In either case, the community college or colleges in the area should be continued, to provide the distinctive services they are best qualified to furnish.

CHAPTER III

FACTORS AFFECTING THE PROVISION OF OPPORTUNITIES FOR POST-HIGH SCHOOL EDUCATION IN TWO-YEAR COLLEGES IN VIRGINIA

The factors affecting the provision of post-high school educational opportunities in a state-wide system of comprehensive community colleges in Virginia are stated very succinctly in the introduction to the Virginia Senate Joint Resolution No. 30. They are:

> (1) unprecedented numbers of Virginians are seeking admission to institutions of higher learning;
>
> (2) employment opportunities in Virginia's changing and expanding economy are creating needs for more graduates at the post-high school, college, and graduate levels;
>
> (3) Virginia's program of industrial development is causing greater demands for advanced training and research in business, commercial, scientific, and technological fields;
>
> (4) urbanization, higher standards of living, and related social changes are increasing requirements for medical, dental, and other professional and social services . . .

For the purpose of providing educational opportunities appropriate to the needs of the State arising from these conditions, the Resolution directs the Commission on Higher Education to " . . . consult with state institutions of higher education which operate off-campus branches, divisions, or colleges, and with such state boards and departments as operate area and technical schools, and shall then recommend to the Governor and the General Assembly procedures whereby such branches, divisions, colleges, and schools may be consolidated into a state-wide system of comprehensive community colleges which offer post-high school education for terminal, vocational and technical training and for college transfer programs of not more than two years duration."

To formulate recommendations in compliance with this directive, the Commission has had to study the growth and shifts in the population of the State, the growth in college-age population, the projected college enrollments, and the changes in the economy of the State. Next it was necessary to explore the implications of these developments for post-high school education to meet the demands for advanced training required by emerging employment opportunities and for professional services arising from urbanization and higher standards of living. Among the several sources of data used in this Report are reports prepared by the Commission's staff, data provided by the Southern Regional Education Board, by the American Association of Collegiate Registrars and Admissions Officers, and by other agencies. Only a few of the highlights of these reports as they relate to the establishment of two-year colleges are noted here.

Growth in Population

The growth and geographical shifts in the population of Virginia compared to other Southern states and to the United States as a whole are shown in Table 1.

It will be observed that during the period 1950-64 the rate of population growth in Virginia, 31.9 per cent, exceeded that of the United States, 27 per cent, and of the Southern region, 24.5 per cent. Only four states

Table 1. TOTAL POPULATION, 1950 AND 1964; PER CENT INCREASE 1950-1964; PER CENT URBAN 1950 AND 1964[a]

	Total Population			Per Cent Urban	
State	1950	1964 (Estimated)	Per Cent Increase 1950-1964	1950	1964
United States	150,697,361	191,334,000	27.0	64.0	69.9
South	46,394,910	58,445,000	24.5	47.8	57.9
South as a Per Cent	30.8	30.5	-	(23.0)[b]	(25.1)[b]
Alabama	3,061,743	3,407,000	11.3	43.8	54.8
Arkansas	1,909,511	1,933,000	1.2	33.0	54.3
Delaware	318,085	491,000	54.4	62.6	65.7
Florida	2,771,305	5,705,000	105.9	65.5	73.9
Georgia	3,444,578	4,294,000	24.6	45.3	55.3
Kentucky	2,944,806	3,159,000	7.7	36.8	44.5
Louisiana	2,683,516	3,468,000	29.2	54.8	63.3
Maryland	2,343,001	3,432,000	46.5	69.0	72.8
Mississippi	2,178,914	2,314,000	6.2	27.9	37.7
North Carolina	4,061,929	4,852,000	19.4	33.7	39.5
Oklahoma	2,233,351	2,465,000	10.4	51.0	62.9
South Carolina	2,117,027	2,555,000	20.7	36.7	41.2
Tennessee	3,291,718	3,798,000	15.4	44.1	52.3
Texas	7,711,194	10,397,000	34.8	62.7	75.0
Virginia	3,318,680	4,378,000	31.9	47.0	55.6
West Virginia	2,005,552	1,797,000	10.4	34.6	38.2

[a] Schietinger, E. F., Fact Book on Higher Education in the South, 1965, Southern Regional Education Board, Atlanta, 1965, p. 8, as derived from U. S. Bureau of the Census, U. S. Census of Population, 1950 and 1960; Current Population Estimates, Series P-25, No. 294, Nov. 5, 1964.

[b] Urban population in the South as a per cent of urban population in the United States.

in the South, Florida, Delaware, Maryland, and Texas, had larger percentages of population increase than Virginia. The shift in Virginia from rural to urban population during the same 14-year period, from 47 to 55.6 per cent, was less dramatic than in some of the other Southern states, but it corresponds closely to the average for the South.

It is especially important in considering the implications of population changes for post-high school education, to take account of the areas in the State where most significant shifts occurred. Data presented by the Bureau of Population and Economic Research of the University of Virginia show that, in 1964, 52.7 per cent of the State's population was concentrated in the six metropolitan areas shown in Table 2. The remaining 47.3 per cent of the State's population was distributed quite unevenly among other areas of the State. Moreover, each of 23 counties showed a decline in population ranging from .1 per cent in Buckingham County to 7.2 per cent in Highland County.

The shifts in the college-age (18-21) segment of the population are similar to trends for the total population.

For the purpose of anticipating future needs for post-high school educational opportunities, estimates were made of the growth in the college-age segment of the population.

After considering various assumptions for this purpose, the staff of the Commission based its projections on the assumption that the annual rate of increase in Virginia between 1964 and 1980 will be 1.2 per cent. This is the average rate of increase for the nation as a whole between 1953

Table 2. ESTIMATED POPULATION OF THE METROPOLITAN AREAS OF VIRGINIA, JULY 1, 1964[a]

Area	1960	1964	Per Cent Change 1960-1964
State	3,954,429	4,307,591	8.9
Washington, D. C. - Virginia Part	527,098	643,098	22.0
Richmond	408,494	442,211	8.3
Newport News - Hampton	224,503	258,715	15.2
Norfolk - Portsmouth	578,507	636,685	10.1
Lynchburg	110,701	117,605	6.2
Roanoke	158,803	171,728	8.1
All Metropolitan Areas	2,008,106	2,270,042	13.0
Per Cent of State	50.8	52.7	
Rest of State	1,946,323	2,037,549	4.7
Per Cent of State	49.2	47.3	

[a] Bureau of Population and Economic Research, Estimates of the Population of the Counties and Cities of Virginia as of July 1, 1965, University of Virginia, Charlottesville, Virginia, January 1965, p.7.

and 1964.

Compared with estimates and projections that are found in other reports, those made by the Commission's staff appear to be very conservative. Two comparisons are shown in Table 3.

Table 3. ESTIMATED POPULATION 18-21 YEARS OF AGE IN VIRGINIA, 1965-1975

Source of Estimate	1965	1970	1975
Virginia Commission[a]	272,000	323,000	351,000
Ronald B. Thompson[b]	305,951	343,081	386,001
SREB[c]	325,000	397,000	-

[a] Connor, J. R., State-Wide Pattern of Higher Education in Virginia, Staff Report #2, Virginia Higher Education Study Commission, Richmond, 1965, p. 51

[b] Thompson, Ronald B., Enrollment Projections 1961-1978, American Association of Collegiate Registrars and Admissions Officers.

[c] Schietinger, E. F., Fact Book on Higher Education in the South, 1965, Southern Regional Education Board, Atlanta, 1965.

These comparisons are shown only for the purpose of reinforcing the observations that the data presented in the Commission staff's Report are conservative. The reasons for this conservative estimate, one of which is adjustments made to take into account non-resident military personnel included in the 1960 census, are given in the Commission's Report.

The areas of the State in which the largest projected increases in college-age population will occur between 1960 and 1985 and anticipated numerical increases are shown in Table 4 and on Map 1.

Table 4. ESTIMATED POPULATION 18-21 YEARS OF AGE, FOR SUBREGIONS OF VIRGINIA, 1960 - 1985[a]

Area	1960	1965	1970	1975	1980	1985	Index of Change, 1960 = 100					
							1960	1965	1970	1975	1980	1985
STATE	216,880	271,978	323,438	351,366	368,000	380,000	100	125	149	162	170	175
1.A	25,186	36,717	49,163	55,516	61,456	64,220	100	146	195	220	244	255
1.B	27,634	35,629	44,311	49,191	52,808	55,100	100	129	160	178	191	199
1.C	10,178	13,871	17,336	19,325	21,160	22,800	100	136	170	190	208	224
1.D	26,456	33,997	41,077	47,434	50,048	52,820	100	129	155	179	189	200
1.1	2,255	2,448	2,587	2,635	2,392	2,280	100	109	115	117	106	101
1.2	7,235	8,431	9,218	8,784	8,096	7,600	100	117	127	121	112	105
1.3	2,362	2,312	2,587	2,987	3,275	3,800	100	98	110	126	139	161
1.4	2,368	2,584	2,652	2,530	2,355	2,280	100	109	112	107	99	96
1.5	2,311	2,611	2,814	3,057	3,201	3,230	100	113	122	132	139	140
1.6	5,539	6,935	8,248	9,065	9,605	9,994	100	125	149	164	173	180
1.7	4,115	4,732	5,078	5,095	4,968	4,940	100	115	123	124	121	120
1.8	7,478	8,975	10,253	11,068	11,482	11,780	100	120	137	148	154	158
1.9	6,113	9,519	13,326	16,338	19,578	20,520	100	156	218	267	320	336
2.1	8,899	10,226	10,415	10,541	10,304	10,260	100	115	117	118	116	115
2.2	9,784	11,967	13,908	14,582	14,867	15,010	100	122	142	149	152	153
3.1	4,884	5,848	6,630	7,027	7,213	7,220	100	120	136	144	148	148
3.2	7,596	9,519	11,482	12,473	12,880	13,300	100	125	151	164	170	175
4.1	8,399	10,444	12,323	13,282	13,837	14,136	100	124	147	158	165	168
4.2	5,528	6,392	7,116	6,676	5,888	5,700	100	116	129	121	107	103
4.3	14,559	18,223	21,444	22,839	23,920	24,700	100	125	147	157	164	170
5.1	3,350	3,400	3,655	3,514	3,201	3,040	100	101	109	105	96	91
5.2	11,666	13,327	14,231	14,055	13,064	12,920	100	114	122	120	112	111
5.3	12,985	13,871	13,584	13,352	12,402	12,350	100	107	105	103	96	95

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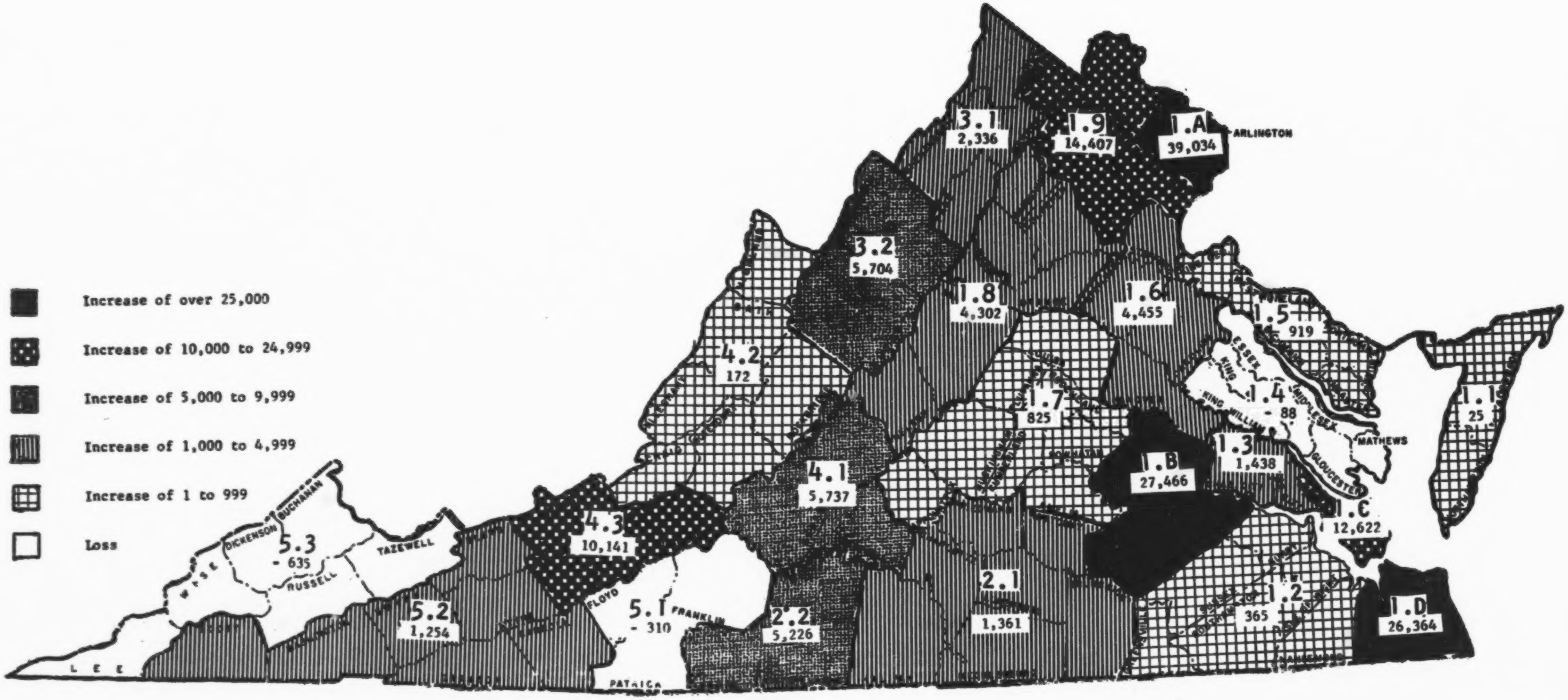
[a] Virginia Higher Education Study Commission, Prospective College-Age Population in Virginia, by Subregions, 1960-1985, Staff Report #1, The Commission, Richmond, Virginia, January 1965, p. 11a, as derived from U. S. Census of Population 1960. Estimates by Bureau of Population and Economic Research, University of Virginia.

MAP 1

PROJECTED INCREASE IN COLLEGE-AGE (18-21) POPULATION IN VIRGINIA BETWEEN 1960 AND 1985, BY SUBREGIONS[a]


■ Increase of over 25,000
▩ Increase of 10,000 to 24,999
▦ Increase of 5,000 to 9,999
▥ Increase of 1,000 to 4,999
⊞ Increase of 1 to 999
☐ Loss
1.A 39,034
ARLINGTON
1.9 14,407
3.1 2,336
3.2 5,704
1.8 4,302
1.6 4,455
1.5 919
1.1 25
4.2 172
1.7 825
1.4 - 88
ESSEX
KING
KING WILLIAM
MIDDLESEX
GLOUCESTER
MATHEWS
1.3 1,438
1.B 27,466
1.C 12,622
4.1 5,737
4.3 10,141
2.1 1,361
1.2 365
1.D 26,364
5.3 - 635
BUCHANAN
DICKENSON
TAZEWELL
RUSSELL
WISE
5.2 1,254
FLOYD
5.1 - 310
FRANKLIN
2.2 5,226
LEE
PATRICK

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[a] Virginia Higher Education Study Commission, Prospective College-age Population in Virginia, by Subregions, 1960-1985, Staff Report #1, The Commission, Richmond, Virginia, January 1965, p. 14.

These data are summarized in Staff Report #1 of the Higher Education Study Commission[1] as follows:

> . . . For the Commonwealth as a whole, it is estimated that the college-age (18-21) population will increase by 75 per cent within two and one-half decades, from 216,880 in 1960 to 380,000 in 1985.
>
> Subregions of the Commonwealth for which the largest numbers of college-age population are projected by 1985 are Northern Virginia (Arlington and Fairfax Counties; Alexandria, Fairfax, and Falls Church cities) with 64,220; Richmond-Petersburg-Hopewell (Chesterfield, Dinwiddie, Henrico, and Prince George Counties; Colonial Heights, Hopewell, Petersburg, and Richmond cities) with 55,100; and Southside Hampton Roads (Chesapeake, Norfolk, Portsmouth, and Virginia Beach cities) with 52,820.
>
> The highest *rate* of growth of college-age population over the next two and a half decades will occur in the Northern Piedmont subregion (Clarke, Fauquier, Loudon, and Prince William Counties) with a projected increase of 236 per cent. Other subregions which will double the number of college-age youth between 1960 and 1985 are the Alexandria-Arlington-Fairfax subregion (155 per cent increase); Northside Hampton

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[1] Connor, J. R., *State-Wide Pattern of Higher Education in Virginia*, Staff Report #2, Virginia Higher Education Study Commission, Richmond, 1965, pp. iv-v.

Roads consisting of Hampton and Newport News cities and York County (124 per cent increase); and Southside Hampton Roads (100 per cent increase).

Three other subregions show rates of growth of college-age population between 1960 and 1985 equal to or higher than the State average; the Richmond-Petersburg-Hopewell subregion, which will almost double its college-age youth with a 99 per cent increase; the Fall Line Area (Caroline, Hanover, Spotsylvania, and Stafford Counties; and Fredericksburg city) with an 80 per cent increase; and the Upper Shenandoah subregion (Augusta and Rockingham Counties; Harrisonburg, Staunton, and Waynesboro cities) with a 75 per cent increase.

Thirteen subregions of the Commonwealth will show increases in college-age population, but at rates less than 75 per cent average for the entire State. If the assumptions about population development prove accurate, the total population in each of ten of these thirteen subregions will decrease rather sharply by 1980. . .[1] In spite of this trend in total population, the college-age population in each of these ten subregions will continue to show some increase until 1975, and these increases will continue up to 1985 in seven of these subregions. Only slight declines will occur in college-age population by 1985, from the level reached in 1960, in the other three subregions: the Middle Peninsula (Essex, Gloucester, King and Queen, King William, Mathews, and Middlesex Counties); the Blue Ridge-Piedmont Counties (Floyd, Franklin, and Patrick); and the Cumberland Area (Buchanan, Dickerson, Lee, Russell, Tazewell, and Wise Counties; Norton city).

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[1] See Table 4 of this Report.

Economic Developments

Economic developments in Virginia have a direct bearing on future demands for post-high school education. The economic resources and development of the State are presented in detail in publications issued by the Division of Industrial Development and Planning. A few facts taken from these publications will suffice to illustrate important changes in the economy of the State that have implications for education.

Changes in the basic economy are reflected in the number of persons engaged in various kinds of employment. The changes that occurred in the employment picture during the 1950-60 decade are shown in Table 5.

The most impressive changes that took place during the decade were sizable declines in employment in agriculture, fisheries, mining, and rail transportation. These declines were more than offset, however, by gains in manufacturing, federal government activities, and travel-trade.

The continuing shift in the components of Virginia civilian labor force is shown in Table 6.

Table 5. VIRGINIA'S BASIC-TYPE AND SERVICING-TYPE EMPLOYMENTS, 1950 AND 1960[a]

	1950		1960		
	Employment	Per Cent of Employed Labor Force	Employment	Per Cent of Employed Labor Force	Per Cent Change 1950-60
Agriculture	167,383	13.3	99,806	6.8	-40.4
Fisheries	6,695	.5	4,867	.3	-27.3
Manufacturing[b]	236,704[b]	18.8[b]	299,935[b]	20.3[b]	26.7
Federal Government					
Military	108,935	8.7	133,082	9.0	22.2
Federal Civilian[b]	106,221[b]	8.4[b]	131,336[b]	8.9[b]	23.6
Mining	28,985	2.3	19,277	1.3	-33.5
Rail Transportation	35,670	2.8	24,354	1.7	-31.7
Ports Other Than Rail	12,000	1.0	13,000	.9	8.3
Travel Trade	30,000	2.4	36,000	2.4	20.0
Total of above[b]	722,593[b]	57.4[b]	751,657[b]	51.0[b]	4.0
Servicing-type	536,506	42.6	722,279	49.0	34.6
Employed Labor Force	1,259,099	100.0	1,473,936	100.0	17.1

[a] Holm, Ed A., Changing Virginia Economy, Division of Industrial Development and Planning, Richmond, August, 1962.

[b] 10,000 has been subtracted from basic employment total for 1950 and for 1960 to prevent double counting of employees at Norfolk Navy Yard who are included under both manufacturing and federal civilians. Figures derived chiefly from U.S. Census of Population, 1960.

Table 6. COMPONENTS OF VIRGINIA'S CIVILIAN LABOR FORCE[a]
(In Thousands)

Subject	Annual Averages				11 Month Averages	
	1960	1961	1962	1963	1963	1964
Civilian work force	1,436.8	1,457.1	1,481.5	1,512.4	1,511.4	1,548.8
Workers on strike	.3	.0	.2	.1	.2	.1
Unemployment	59.0	65.4	51.6	49.1	49.3	49.5
Per cent of work force	4.1	4.5	3.5	3.2	3.3	3.2
National unemployment rate (%)	5.6	6.7	5.6	5.7	5.7	5.3
Total employment	1,377.5	1,391.7	1,429.7	1,463.2	1,461.9	1,499.2
Agriculture	139.0	132.7	126.1	119.2	121.3	112.7
Nonagriculture	1,238.5	1,259.0	1,303.6	1,344.0	1,340.6	1,386.5
Manufacturing	275.0	276.0	292.4	297.4	296.7	307.1
Nonmanufacturing	742.6	758.8	789.4	826.2	823.7	847.7
Other[b]	220.9	224.2	221.8	220.4	220.2	231.7

[a] Commonwealth of Virginia, Governor's Office, Division of Industrial Development and Planning, 1010 State Office Building, Richmond, Virginia 23219, December 21, 1964. The Virginia Economy in 1964 as derived from Virginia Employment Commission.

[b] Includes self-employed, unpaid family workers and domestics, and federal government workers in Virginia portion of Washington, D. C. metropolitan area.

The categories of employment used in this table are not directly comparable to those in the preceding table. Several facts are obvious, however, from these data.

1. There has been a continuing decline in the agricultural labor force.
2. The percentage of unemployment has been consistently below the national average.
3. There has been a steady though not spectacular growth in employment in the manufacturing field.
4. The largest segment of non-agricultural employment is in the non-manufacturing area.

Some of the implications of these changes for education are:

First, the decline in farm employment does not suggest that there has been a corresponding decline in farm production. It means rather, that technology in farming has advanced at a rapid pace, thereby reducing the demand for farm labor and that this shift is likely to continue. According to the Virginia Economic Review, "It would appear that the persons who remain in farming should have at least a high school or college education and should be prepared to continue their education as adults in order to adjust to changing competitive farm techniques."[1]

Second, concerning manufacturing, it is noted that changes in the composition of manufacturing industries combined with technological advances have led to a significant upgrading in occupations. Male employment in manufacturing increased 25 per cent during the decade from 1950-1960; but the number of technical and professional workers increased 128 per cent; craftsmen 42 per cent; semi-skilled workers 13 per cent; while laborers declined by 17 per cent. This upgrading of employees in manufacturing is likely to continue.[1]

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[1] The Virginia Economic Review, July, 1963, p. 3.

Third, a large number of federal employees - civilian and military - live in Virginia. Federal activities account for about 18 per cent of Virginia's labor force and 25 per cent of all the wages and salaries paid in the State. Because of the large size of the group of federal employees and the high rate of increase, federal government activities are an important factor in the marked growth experienced by Virginia since 1950, especially in the section of Virginia that is a part of the Washington, D. C. metropolitan area and in the area around Hampton Roads. There is a considerable continuous upgrading in the educational and training requirements for government employment.

Fourth, the urbanization of Virginia's population has given rise to a substantial increase in the demand for medical and other types of professional services. "From 1920-1950, physicians and surgeons, pharmacists and dentists increased at about the same rate as the population. During the fifties, Virginia experienced an increase of 36 per cent in physicians and surgeons, 16 per cent in pharmacists, and 34 per cent in dentists - far above the 19.5 per cent increase in the State's population and in the national increases registered for the decade."[1] Similar increases in the demands in other fields, for example, nursing, engineering, and teaching, must be anticipated.

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[1] Ibid., p. 5.

Fifth, of special importance in considering the implications of these changes for post-high school education is the demand for technicians in such fields as manufacturing, health services, and data processing. The demand for new technicians, craftsmen, and operators to provide for replacements and expansions will be almost 100,000 by 1970. Over against an annual demand of 9,700 in manufacturing alone, only about 2,100 are being trained annually.

The economic development of Virginia and the dependence of this development on the provision of appropriate and adequate educational programs give strong support to the need for the expansion of post-high school educational opportunities, especially at the two-year college level.

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[1] *Ibid.*

CHAPTER IV

VIRGINIA'S TWO-YEAR POST-HIGH SCHOOL INSTITUTIONS

This section of the Report describes the present status of two-year colleges in Virginia. Both state-controlled and privately controlled institutions are discussed, with a focus on the complementary relationships between the two systems. The data presented were collected by mail on questionnaire forms, and in personal interviews with each two-year college president or director.

State-Controlled Two-Year Colleges

Organization and Administration

All state-controlled two-year colleges in Virginia are affilliated with either the University of Virginia, Virginia Polytechnic Institute, or The College of William and Mary. The following table lists the state-controlled two-year colleges by parent institution.

Table 7. LOCATION, TYPE AND DATE FOUNDED FOR EACH STATE-CONTROLLED TWO-YEAR COLLEGE

Institution	Location	Type	Founded
University of Virginia			
Clinch Valley College	Wise	Coed	1954
Eastern Shore Branch	Wallops Island	Coed	1964
George Mason College	Fairfax	Coed	1957
Lynchburg Branch	Lynchburg	Coed	1962
Patrick Henry College	Martinsville	Coed	1964
Virginia Polytechnic Institute			
Clifton Forge-Covington Community College	Clifton Forge	Coed	1964
Danville Community College	Danville	Coed	1950
Roanoke Technical Institute	Roanoke	Coed	1961
Wytheville Community College	Wytheville	Coed	1962
The College of William and Mary			
Christopher Newport College	Newport News	Coed	1960
Richard Bland College	Petersburg	Coed	1960

Map 2 indicates specific geographical locations of the 11 state-controlled and 12 privately controlled two-year institutions. The general area serviced by each of these colleges is outlined by a circle with a radius of 25 miles and centered at the college.

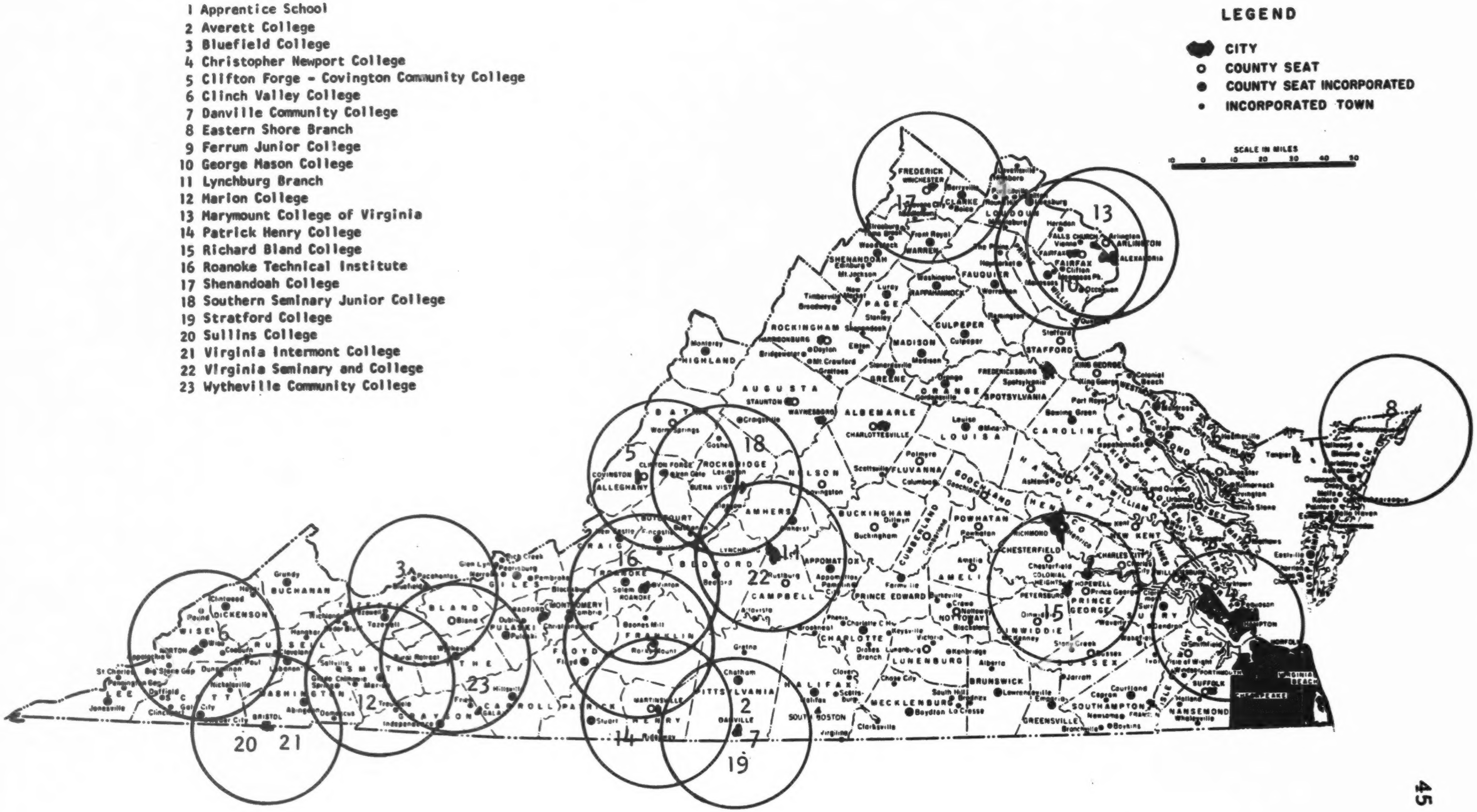
Although the 11 state-controlled branches are operated in a similar manner, there are noticeable differences in degree of control exercised and level of cooperation offered by the different parent institutions. There are also differences between the parent institutions in organization and administration for operating two-year colleges. Virginia Polytechnic Institute and The College of William and Mary each have designated one person to coordinate the operation of their respective two-year branches, but Virginia Polytechnic Institute exercises a higher degree of central control over its community colleges than The College of William and Mary. The University of Virginia has established a dual organization; two of its satellite institutions are coordinated by a Chancellor for Community Colleges, while three are controlled by the School of General Studies.

A further variation exists in the organization of two-year colleges under the direction of The College of William and Mary. These two-year institutions are by statute independent of the President and report to the Board of Visitors through a Coordinator. Matters relating to accreditation and academic affairs, however, are the responsibility of the President and the Dean of The College of William and Mary. Authorities at the College state that the branches are subject to considerable supervision by the Dean of the College and Department Chairmen.

MAP 2

LOCATION OF VIRGINIA INSTITUTIONS OF HIGHER EDUCATION OFFERING FIRST TWO YEARS ONLY (STATE AND PRIVATELY CONTROLLED)

1 Apprentice School
2 Averett College
3 Bluefield College
4 Christopher Newport College
5 Clifton Forge - Covington Community College
6 Clinch Valley College
7 Danville Community College
8 Eastern Shore Branch
9 Ferrum Junior College
10 George Mason College
11 Lynchburg Branch
12 Marion College
13 Marymount College of Virginia
14 Patrick Henry College
15 Richard Bland College
16 Roanoke Technical Institute
17 Shenandoah College
18 Southern Seminary Junior College
19 Stratford College
20 Sullins College
21 Virginia Intermont College
22 Virginia Seminary and College
23 Wytheville Community College


LEGEND
CITY
O COUNTY SEAT
● COUNTY SEAT INCORPORATED
• INCORPORATED TOWN
SCALE IN MILES
10 0 10 20 30 40 50
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
FREDERICK
CLARKE
LOUDOUN
FAIRFAX
ARLINGTON
ALEXANDRIA
SHENANDOAH
WARREN
PAGE
FAUQUIER
ROCKINGHAM
CULPEPER
MADISON
STAFFORD
HIGHLAND
AUGUSTA
GREENE
ORANGE
SPOTSYLVANIA
CAROLINE
ALBEMARLE
LOUISA
ROCKBRIDGE
NELSON
FLUVANNA
GOOCHLAND
ALLEGHANY
BOTETOURT
AMHERST
BUCKINGHAM
CUMBERLAND
POWHATAN
HANOVER
RICHMOND
CHESTERFIELD
BEDFORD
CAMPBELL
APPOMATTOX
PRINCE EDWARD
AMELIA
PRINCE GEORGE
DINWIDDIE
ROANOKE
FRANKLIN
CHARLOTTE
NOTTOWAY
LUNENBURG
BRUNSWICK
SUSSEX
HALIFAX
MECKLENBURG
SOUTHAMPTON
GREENSVILLE
NANSEMOND
PITTSYLVANIA
HENRY
PATRICK
FLOYD
CARROLL
GRAYSON
WYTHE
SMYTH
WASHINGTON
RUSSELL
SCOTT
LEE
WISE
DICKENSON
BUCHANAN
BLAND
GILES
PULASKI
MONTGOMERY
CRAIG
BATH
DANVILLE
BRISTOL
LYNCHBURG
NORFOLK
VIRGINIA BEACH
CHESAPEAKE
SUFFOLK
HAMPTON

Circles outline service area with radius of 25 miles from institutional location.

The three major institutions, in addition to operating the eleven formally organized and recognized branches, carry on extension activities throughout the State. The teaching of regular college-credit classes is a major activity of the extension services. In some communities the parent institution has developed a fairly extensive array of courses, and the volume has reached proportions that require the setting up of a local organization for managing the program in the community. These extension "centers" may offer a sufficient variety of courses to enable students to complete as much as the full two-year curriculum of the freshman and sophomore years; in addition selected advanced courses, including some at the graduate level, may be offered in an extension "center." Indeed, the extension "center" seems to be the matrix out of which some of the recognized two-year branches have grown, and the activities of the "center" may be continued in the same community, even after the formally organized branch college has been developed. Inasmuch as the "centers" are not recognized officially as two-year colleges, they are not treated in Staff Report #4. Staff Report #7 for the Higher Education Study Commission deals with the whole problem of extension services.

Privately Controlled Institutions

The permanence and quality of the 12 privately controlled two-year institutions in Virginia are demonstrated by many years of successful service; more than half of these institutions were founded before the turn of the century. Included with the privately controlled two-year colleges is the Apprentice School of the Newport News Shipbuilding and Dry Dock Company. Table 8 lists the privately controlled institutions in Virginia.

Table 8. LOCATION, TYPE, DATE FOUNDED, AND SPONSORSHIP FOR EACH PRIVATELY CONTROLLED TWO-YEAR INSTITUTION

Institution	Location	Type	Founded	Sponsorship
Apprentice School of Newport News Shipbuilding and Dry Dock Co.[a]	Newport News	Men	1942	Industrial
Averett College	Danville	Women	1859	Church
Bluefield College	Bluefield	Coed	1922	Church
Ferrum Junior College	Ferrum	Coed	1913	Church
Marion College	Marion	Women	1873	Church
Marymount College	Arlington	Women	1950	Church
Shenandoah College and Conservatory of Music	Winchester	Coed	1875	Church
Southern Seminary and Junior College	Buena Vista	Women	1867	Independent
Stratford College[b]	Danville	Women	1930	Independent
Sullins College	Bristol	Women	1879	Independent
Virginia Intermont College	Bristol	Women	1884	Church
Virginia Seminary and College	Lynchburg	Coed	1888	Church

[a] A three-year technical-vocational program is operated by the Apprentice School.

[b] Founded in 1852 as Danville Female College.

Eight of the 12 privately controlled institutions are church related. Seven of the 12 are two-year colleges for women, four are coeducational, and one is for men only. Map 2 shows the location of all two-year institutions with circles depicting general areas serviced. The varied impact of each type of two-year institution of higher education in Virginia is summarized in the following discussion of enrollment. In accordance with the general policy of the Study, each privately controlled institution for which specific data are presented in this Report is identified only by a code number, not by name.

Enrollment

Enrollment in Virginia's state-controlled two-year institutions totaled 3,314 students (2,607.5 full-time equivalent[1]) in the Fall of 1964, and for the same period the privately-controlled two-year colleges enrolled 4,664 students (4,755 full-time equivalent[2]). Thus, the combined enrollment for all students in two-year institutions was 7,978 in the Fall of 1964. Table 9 lists enrollment by sex for all two-year colleges. This table shows that more than two-thirds of the students in the state-controlled institutions are men, but more than two-thirds of those in privately controlled institutions are women. In the combined enrollment figures for all two-year institutions, there are 3,855 men students and 4,123 women.

The data in Table 10, on geographical origins of students attending the two-year colleges in Virginia show, that state-controlled colleges are

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[1] Full-time equivalent enrollment is computed by dividing total semester credit hours by fifteen. Full-time equivalent may be abbreviated F. T. E.

[2] The full-time equivalent enrollment in the privately controlled two-year institutions exceeds their total enrollment figure because most students in these institutions take more than fifteen semester credit hours.

Table 9. TOTAL ENROLLMENT BY SEX AND FULL-TIME EQUIVALENT ENROLLMENT IN EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Men	Women	Total[a]	Full-time[b] Equivalent Students
State-Controlled				
Clinch Valley College	188	113	301	294
Eastern Shore Branch	86	17	103	64.4
George Mason College	239	115	354	352
Lynchburg Branch	41	16	57	42.6
Patrick Henry College	75	39	114	86.5
Clifton Forge Covington Com. Col.	91	94	185	108
Danville Community College	235	30	265	261
Roanoke Technical Institute	322	10	332	261
Wytheville Community College	222	35	257	230
Christopher Newport College	500	304	804	449
Richard Bland College	333	209	542	460
Total - State-Controlled	2332	982	3314	2608.5
Per Cent of Total - State-Controlled	70.37	29.63	100.00	-
Privately Controlled				
41	-	357	357	404
49	-	291	291	291
38	480	-	480	480
21	34	25	59	58
26	538	276	814	860
65	-	474	474	474
93	-	498	498	496
42	-	470	470	470
64	16	149	165	163
22	-	310	310	310
51	236	131	367	398
37	219	160	379	351
Total - Privately Controlled	1523	3141	4664	4755
Per Cent of Total - Privately Controlled	32.65	67.35	100.00	-
Total - All Institutions	3855	4123	7978	7363.5
Per Cent of Total - All Institutions	48.32	51.68	100.00	-

[a] Differences in enrollment figures between Table 9 and Table 10 can be explained by the inclusion of all students on Table 9 and the exclusion of some non degree-credit students on Table 10, and different reporting dates.

[b] Full-time equivalent figures include all students, degree-credit and non degree-credit.

Table 10. GEOGRAPHICAL ORIGINS OF STUDENTS ATTENDING EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Total Enroll-ment	Number from Adjacent Counties[a]	Per Cent from Adjacent Counties[a]	Number from Virginia	Per Cent from Virginia
State-Controlled					
Clinch Valley College	301	216	71.76	298	99.00
Eastern Shore Branch	103	64	62.14	67	65.05
George Mason College	345	148	42.90	330	95.65
Lynchburg Branch	57	54	94.74	57	100.00
Patrick Henry College	114	111	97.37	113	99.12
Clifton Forge Covington Com. Co.	92	49	53.26	88	95.65
Danville Community College	264	202	76.52	258	97.73
Roanoke Technical Institute	279	213	76.34	271	97.13
Wytheville Community College	216	189	87.50	214	99.07
Christopher Newport College	804	732	91.04	756	94.03
Richard Bland College	542	332	61.25	537	99.08
Totals - State-Controlled	3117	2310	74.11	2989	95.89
Privately Controlled - Women's					
75	472	30	6.36	56	11.86
89	308	21	6.82	94	30.52
99	465	17	3.66	118	25.38
94	357	3	.84	37	10.36
84	304	14	4.61	71	23.36
83	498	118	23.69	372	74.70
91	163	46	28.22	92	56.44
Totals - Women's Privately Controlled	2567	249	9.70	840	32.72
Privately Controlled - Coed and Men's					
96	773	140	18.11	726	93.92
80	481	221	45.95	361	75.06
88	357	65	18.21	287	80.39
78	493	198	40.16	400	81.14
85	65	11	16.92	44	67.69
Totals - Coed and Men's Privately Controlled	2169	635	29.28	1818	83.82
Totals - All Privately Controlled	4736	884	18.67	2658	56.12
Totals - All Two-Year Colleges	7853	3194	40.67	5647	71.91

[a] The term adjacent counties includes the independent city or county in which the institution is located plus all counties which border on the county of location.

almost exclusively populated by Virginians, and 74.11 per cent come from within a narrow radius around the colleges. A majority of the students attending privately controlled coeducational institutions are Virginians, but less than one-fifth come from the local area. Women's colleges get more than two-thirds of their students from outside Virginia, but less than 10 per cent from their local area. Table 11, a summary of Table 10, shows that in both types of institutions combined, 71.91 per cent of the students in the two-year colleges come from Virginia; 40.67 per cent come from the local area near the college attended.

Table 11. SUMMARY INFORMATION FROM TABLE 10 ON GEOGRAPHICAL ORIGINS OF STUDENTS ATTENDING TWO-YEAR COLLEGES FALL, 1964

Institutions	Total Enrollment	No. from Adjacent Counties	Per Cent from Adjacent Counties	No. from Virginia	Per Cent from Virginia
Total - State-Controlled	3117	2310	74.11	2989	95.89
Total - Privately Controlled	4736	884	18.67	2658	56.12
Total - All Two-Year Colleges	7853	3194	40.67	5647	71.91

The 7,978 students attending two-year colleges in Virginia (see Table 9) comprise only 10.22 per cent of the total number (78,041 students) attending all institutions of higher education in the Commonwealth; nationally 14.3 per cent of all college students are enrolled in two-year colleges. The development of the two-year college in Virginia has obviously lagged behind that in the nation as a whole.

Table 12 lists total enrollment estimates (all programs) made by the state-controlled two-year college directors and privately controlled two-year college presidents for the years 1970, 1975, and 1980. The relationship of these estimates to total enrollment projections (degree-credit students only) for the same years is also shown. Estimates from the existing privately controlled institutions show that these colleges expect to accommodate a decreasing percentage of the total number of college students over the years.

The second line in Table 12 shows that the state-controlled institutions expect to enroll an increasing percentage of all college students in Virginia. Any interpretation of these increasing percentages, however, must take into account a large future enrollment projected by certain state-controlled two-year colleges whose estimates were based on the possibility that they would expand to four-year degree-granting status. (This criterion for making estimates was not suggested by the Commission staff.) Since these large estimates may distort the percentage of total enrollment which is estimated for two-year colleges in the future, separate lines of figures are shown which omit the two-year colleges

Table 12. TOTAL ENROLLMENT ESTIMATES BY THE CHIEF EXECUTIVES OF ALL TWO-YEAR COLLEGES FOR 1970, 1975 and 1980 (ALL PROGRAMS) AS PER CENT OF ESTIMATED TOTAL ENROLLMENT FIGURES FOR ALL INSTITUTIONS OF HIGHER EDUCATION IN VIRGINIA (FALL TERM HEAD COUNT, DEGREE-CREDIT STUDENTS ONLY)

Institutions	1964		1970		1975		1980	
	Current Enrollment Two-Year Institutions	Per Cent of Enrollment[a] All Virginia Colleges	Two-Year Institutions	Per Cent of Enrollment[b] All Virginia Colleges	Two-Year Institutions	Per Cent of Enrollment[c] All Virginia Colleges	Two-Year Institutions	Per Cent of Enrollment[d] All Virginia Colleges
Privately Controlled Two-Year Colleges	4,664	5.97	6,545	5.42	7,050	4.63	7,550	4.15
State Controlled Two-Year Colleges	3,314	4.25	13,855	11.47	22,500	14.77	31,500	17.33
State Controlled Two-Year Colleges Omitting Those That Expect to Become Four Year	2,156	2.76	6,855	5.67	10,500	6.89	14,300	7.87
Totals - All Two-Year Colleges	7,978	10.22	20,390	16.88	29,550	19.40	39,050	21.48
Totals - All Two-Year Colleges Omitting Those That Expect to Become Four Year	6,819	8.73	13,400	11.09	17,550	11.52	21,850	12.01

[a] Total enrollment, all institutions of higher education, 1964: 78,041

[b] Estimated total enrollment, all institutions of higher education, 1970: 120,802

[c] Estimated total enrollment, all institutions of higher education, 1975: 152,334

[d] Estimated total enrollment, all institutions of higher education, 1980: 181,792

that expect to become four-year institutions. Omitting the future enrollments of the institutions that do not expect to remain two-year colleges, the data show that the present state-controlled two-year colleges, although accommodating an increasing percentage for each five-year period, would be enrolling only 7. 87 per cent of all degree-credit students in Virginia in 1980.

The bottom line of Table 12 indicates how slowly the percentage of total college enrollment in all two-year institutions combined would increase if those state-controlled institutions that expect to become four-year colleges are omitted; these figures, furthermore, do not take into account the possibility that some privately controlled two-year colleges may expand to four-year degree-granting status. The information in Table 12 shows that if the percentage of students in two-year colleges is to be increased according to national trends, or even to be maintained at present levels, new two-year colleges will be required. The rather static enrollment projections by the privately controlled colleges indicates that future expansion of two-year college capacity should, necessarily, be provided by new state-controlled institutions.

Tables 13 through 15 summarize the full-time, part-time, and total enrollments by program for all Virginia's two-year colleges. Of all

Table 13. ENROLLMENT BY PROGRAM IN EACH TWO-YEAR COLLEGE, ALL STUDENTS, FALL, 1964

Institution	Transfer Credit	Terminal Occupational	Terminal General Associate Degrees	Terminal General Without Degrees	Adult Education
State-Controlled					
Clinch Valley College	249	52	-	-	-
Eastern Shore Branch	64	39	-	-	-
George Mason College	354	-	-	-	-
Lynchburg Branch	57	-	-	-	-
Patrick Henry College	59	-	55	-	-
Clifton Forge-Covington Community College	92	-	-	27	66
Danville Community College	265	-	-	-	-
Roanoke Tech. Inst.	31	290	-	-	11
Wytheville Community College	241	16	-	-	-
Christopher Newport College	721	61	-	22	-
Richard Bland College	486	56	-	-	-
Totals-State-Controlled	2619	514	55	49	77
Per Cent of Total - State-Controlled	79.0	15.5	1.7	1.5	2.3
Privately Controlled					
91	327	-	40	-	-
72	371	103	-	-	-
70	197	84	-	10	-
95	300	24	35	20	-
77	91	-	-	72	2
86	289	-	181	-	-
76	-	480	-	-	-
81	278	108	109	3	-
92	265	-	45	-	-
82	332	25	-	-	-
63	59	-	-	-	-
83	742	72	-	-	-
Totals - Privately Controlled	3251	896	410	105	2
Per Cent of Total - Privately Controlled	69.7	19.2	8.8	2.26	0.04
Totals - All Colleges	5870	1410	465	154	79
Per Cent Total - All Colleges	73.6	17.7	5.8	1.9	1.0

Table 14. ENROLLMENT BY PROGRAM IN EACH TWO-YEAR COLLEGE, FULL-TIME STUDENTS, FALL, 1964

Institution	Transfer Credit	Terminal Occupational	Terminal General Associate Degrees	Terminal General Without Degree	Adult Education
State-Controlled					
Clinch Valley College	240	49	-	-	-
Eastern Shore Branch	42	-	-	-	-
George Mason College	345	-	-	-	-
Lynchburg Branch	34	-	-	-	-
Patrick Henry College	59	-	-	-	-
Clifton Forge-Covington Community Col.	70	-	-	19	-
Danville Community College	261	-	-	-	-
Roanoke Tech. Inst.	23	189	-	-	-
Wytheville Community College	210	16	-	-	-
Christopher Newport College	253	61	-	-	-
Richard Bland College	347	37	-	-	-
Totals-State-Controlled	1884	352	-	19	-
Per Cent of Total - State-Controlled	83.6	15.6	-	0.8	-
Privately Controlled					
62	90	-	-	70	-
74	275	107	108	-	-
71	332	25	-	-	-
60	317	-	40	-	-
65	265	-	45	-	-
73	734	71	-	-	-
90	59	-	-	-	-
66	234	23	33	13	-
87	371	103	-	-	-
69	289	-	181	-	-
61	-	480	-	-	-
67	197	84	-	10	-
Totals - Privately Controlled	3163	893	407	93	-
Per Cent of Total - Privately Controlled	69.4	19.6	8.9	2.1	-
Totals - All Colleges	5047	1245	407	112	-
Per Cent of Total - All Colleges	74.1	18.3	6.0	1.6	-

Table 15. ENROLLMENT BY PROGRAM IN EACH TWO-YEAR COLLEGE, PART-TIME STUDENTS, FALL, 1964

Institution	Transfer Credit	Terminal Occupational	Terminal General Associate Degrees	Terminal General Without Degree	Adult Education
State-Controlled					
Clinch Valley College	9	3	-	-	-
Eastern Shore Branch	22	39	-	-	-
George Mason College	9	-	-	-	-
Lynchburg Branch	23	-	-	-	-
Patrick Henry College	-	-	55	-	-
Clifton Forge-Covington Community College	22	-	-	8	66
Danville Community College	4	-	-	-	-
Roanoke Tech. Inst.	8	101	-	-	11
Wytheville Community College	31	-	-	-	-
Christopher Newport College	468	-	-	22	-
Richard Bland College	139	19	-	-	-
Totals - State-Controlled	735	162	55	30	77
Per Cent of Total - State-Controlled	69.4	15.3	5.2	2.8	7.3
Privately Controlled					
61	-	-	-	-	-
68	8	1	-	-	-
71	-	-	-	-	-
24	-	-	-	-	-
55	3	1	1	3	-
77	-	-	-	-	-
67	-	-	-	-	-
41	1	-	-	2	2
27	10	-	-	-	-
25	-	-	-	-	-
22	-	-	-	-	-
85	66	1	2	7	-
Totals - Privately Controlled	88	3	3	12	2
Per Cent of Total - Privately Controlled	81.5	2.8	2.8	11.1	1.8
Totals - All Colleges	823	165	58	42	79
Per Cent of Total - All Colleges	70.5	14.1	5.0	3.6	6.8

students in the state-controlled institutions 79.0 per cent are in transfer programs (an outstanding exception to the general pattern is Roanoke Technical Institute); 69.7 per cent of all those enrolled in privately controlled two-year colleges are transfer program students. Table 13 shows that more of the privately controlled colleges are offering terminal curriculums, such as secretarial and business courses, than the state-controlled institutions. Tables 14 and 15 show that, for each category of students, full-time or part-time, a very low number are enrolled in terminal-occupational programs; this is particularly true for the state-controlled institutions. The small enrollments of students in these programs, a problem elsewhere in the United States, is further emphasized by the limited number of programs designed to prepare persons for immediate occupation in technical and business fields in Virginia.

Tables 16 through 19 show that student-credit-hours in regular college subjects make up a large majority of the total offerings in the two-year colleges in Virginia. The following subjects, almost all of which are for transfer credit, as was verified in the visits to the institutions, are common to almost all of the two-year colleges: English and journalism, foreign languages, biological sciences, chemistry, physics, mathematics and statistics, accounting, general business, economics, history, government, psychology, and sociology. Certain other subjects occur in the privately controlled institutions but are negligible in the state-controlled colleges; art, speech and drama, home economics, secretarial studies, and physical education fall into this category. By contrast, a large

Table 16. TOTAL NUMBER OF SEMESTER HOURS BY SUBJECT FIELD OFFERED BY ALL TWO-YEAR COLLEGES AS LISTED IN 1964-65 CATALOGS-HUMANITIES

	Humanities									
Institution	Art	Classical Languages	French	German	Spanish	English and Journal.	Humanities General	Music	Philosophy	Speech and Drama
State Controlled										
Clinch Valley College	12	-	12	12	12	21	12	-	15	6
Eastern Shore Branch	-	-	12	12	12	18	-	-	-	-
George Mason College	6	-	24	24	24	30	6	-	12	-
Lynchburg Branch	-	-	12	12	12	18	-	-	-	-
Patrick Henry College	-	-	12	-	12	24	-	-	-	-
Clifton Forge-Covington Com. Col.	-	-	12	12	-	16	-	-	-	-
Danville Community College	-	-	12	12	-	16	-	-	-	-
Roanoke Technical Institute	-	-	12	12	-	20	-	-	-	2
Wytheville Community College	-	-	12	12	-	16	-	-	-	-
Christopher Newport College	-	-	20	-	14	27	-	-	6	6
Richard Bland College	-	-	14	14	14	15	-	-	6	3
Totals - State Controlled	18	-	154	122	100	221	18	-	39	17
Privately Controlled										
66	33	18[a]	18	-	18	19	6	79	-	21
26	35	-	18	6	18	18	12	37	-	22
84	15	-	18	12	12	19	-	37	-	3
25	6	-	19	13	12	33	12	-	9	12
53	3	-	12	-	-	19	-	3	-	4
72	-	12[b]	12	-	12	17	-	54	-	5
90	39	-	24	-	18	24	3	36	-	31
43	36	26[a]	20	-	20	45	6	65	12	29
93	-	-	-	-	-	2.7	-	-	-	-
96	6	-	18	-	24	12	4	-	6	4
35	6	-	12	-	12	20	-	61	6	6
36	68	-	24	-	24	28	3	100	9	53
Totals - Privately Controlled	241	56	196	31	170	256.7	46	472	42	190
Totals - All	259	56	350	153	270	477.7	64	472	81	207

[a] Latin

[b] Greek

Table 17. TOTAL NUMBER OF SEMESTER HOURS BY SUBJECT FIELD OFFERED BY ALL TWO-YEAR COLLEGES AS LISTED IN 1964-65 CATALOGS-SOCIAL SCIENCES

	Social Sciences							
Institution	Anthropology	Geography	History	Political Science & Government	Psychology	Relig. Educ., Bible	Sociology	Education
State Controlled								
Clinch Valley College	6	6	27	6	9	-	12	5
Eastern Shore Branch	-	-	18	-	6	-	6	-
George Mason College	6	-	30	12	6	-	-	2
Lynchburg Branch	-	-	18	-	6	-	6	-
Patrick Henry College	-	-	12	-	6	-	6	-
Clifton Forge-Covington Com. Col.	-	4	24	6	10	-	4	2
Danville Community College	-	4	24	6	10	-	4	2
Roanoke Technical Institute	-	4	26	6	10	-	4	2
Wytheville Community College	-	4	24	6	10	-	4	2
Christopher Newport College	-	3	12	12	11	-	6	-
Richard Bland College	-	3	12	6	9	-	9	-
Totals - State Controlled	12	28	227	60	93	-	61	15
Privately Controlled								
50	-	6	15	6	12	9	15	3
38	-	-	12	6	12	12	6	-
42	-	-	12	4	8	8	9	16
52	-	-	18	6	9	12	6	-
46	-	-	18	6	15	12	9	18
21	-	6	12	9	6	12	9	2
57	-	-	18	18	9	30	15	24
54	-	-	-	-	.7	-	-	-
23	-	-	12	6	6	21	6	-
45	-	3	12	-	3	6	3	-
24	-	-	39	15	6	12	12	-
58	-	-	12	-	6	6	9	-
Totals - Privately Controlled	-	15	180	66	92.7	120	99	63
Totals - All	12	43	407	126	185.7	120	160	78

Table 18. TOTAL NUMBER OF SEMESTER HOURS BY SUBJECT FIELD OFFERED BY ALL TWO-YEAR COLLEGES AS LISTED IN 1964-65 CATALOGS-MATHEMATICS, SCIENCE AND ENGINEERING

Institutions	Mathematics, Science and Engineering								
	Agri-culture	Bio-logical Sciences	Chemistry	Physical Sciences General	Physics	Other Physical Sciences	Math and Statistics	Engi-neering	Techno-logy
State-Controlled									
Clinch Valley College	-	10	18	-	13	3	40	2	-
Eastern Shore Branch	-	10	10	-	10	-	20	2	-
George Mason College	-	16	23	-	13	-	31	6	-
Lynchburg Branch	-	10	10	-	10	-	20	2	-
Patrick Henry College	-	10	10	-	-	-	15	4	-
Clifton Forge-Covington Com. Col.	-	24	18	-	12	-	37.3	25.4	-
Danville Community College	-	17.5	18	-	12	-	37.3	25.4	-
Roanoke Technical Institute	-	40.7	39.3	-	20	-	44	30.5	100
Wytheville Community College	-	17.5	18	-	12	-	37.3	25.4	-
Christopher Newport College	-	33	24	-	20	-	21	3	-
Richard Bland College	-	28	22	-	23	-	25	6	-
Totals - State-Controlled	-	216.7	203.3	-	134	3	327.9	131.7	100
Privately-Controlled									
43	-	12	16	6	8	-	15	-	-
47	-	-	2.7	-	6.7	1.3	14.7	-	52
40	-	4	24	-	8	-	41.1	-	-
56	-	18	8	-	-	-	21	-	-
28	10	16	21	3	8	3	26	-	-
51	-	8	8	-	-	-	12	-	-
33	-	11	26	-	-	-	28	-	-
22	-	3	-	3	-	-	7	-	-
31	-	11	12	-	4	-	9	-	-
44	-	26	28	4	8	-	41	-	-
85	-	16	16	6	8	-	18	-	-
29	-	17	20	-	-	-	31	-	-
Totals - Privately-Controlled	10	142	181.7	22	50.7	4.3	169.8	-	52
Totals - All	10	358.7	385	22	184.7	7.3	497.7	131.7	152

Table 19. TOTAL NUMBER OF SEMESTER HOURS BY SUBJECT FIELD OFFERED BY ALL TWO-YEAR COLLEGES AS LISTED IN 1964-65 CATALOGS-

BUSINESS, PROFESSIONAL AND GENERAL

	Business and Professional								General	
Institutions	Accounting	General Business	Economics	Home Economics	Nursing	Secretarial Studies	Special Business Fields	Industr'l Arts	Phys. Education	Orientation
State Controlled										
Clinch Valley College	14	20	6	-	-	22	6	-	7	-
Eastern Shore Branch	6	6	6	-	-	-	-	-	-	-
George Mason College	6	-	6	-	-	-	-	-	-	-
Lynchburg Branch	6	6	6	-	-	-	-	-	-	-
Patrick Henry College	6	-	6	-	-	-	-	-	-	-
Clifton Forge-Cov. Com. Col.	8	4	9.3	-	-	-	-	-	-	-
Danville Community College	8	4	9.3	-	-	-	-	-	-	-
Roanoke Technical Institute	8	4.7	9.3	-	-	19.3	7.3	-	-	-
Wytheville Community College	8	4	9.3	-	-	-	-	-	-	-
Christopher Newport College	6	3	12	-	-	-	-	-	-	-
Richard Bland College	12	7	6	-	-	44	-	-	12	-
Total - State Controlled	75	58.7	85.2	-	-	85.3	13.3	-	19	-
Privately Controlled										
82	-	-	2.7	-	-	-	-	2.7	-	-
38	-	-	-	-	-	-	-	-	8	4
31	6	30	6	-	32	31	-	-	7	-
54	6	15	6	32	-	39	-	-	49	1
56	8	8	10	-	-	27	-	-	9	-
37	6	-	-	-	-	32	-	-	14	-
59	3	19	3	9	-	26	-	-	2	-
42	8	9	6	-	-	33	-	-	4	2
33	6	6	6	30	-	24	-	-	38	-
20	6	3	9	18	-	30	-	-	4	-
37	8	22	6	25	-	55	-	-	18	-
34	6	21	3	41	-	31	-	-	36	-
Totals - Privately Controlled	63	133	57.7	155	32	328	-	2.7	191	7
Totals - All	138	191.7	142.9	155	32	413.3	13.3	2.7	210	7

majority of the semester hours of engineering and physics are offered in the state-controlled institutions. The failure of most of the two-year state-controlled colleges to offer courses in physical education is particularly striking; the lack of suitable gymnasium facilities is undoubtedly responsible for this situation.

Societal pressures in the past have been toward higher education for recognized degrees. This seems to be especially true for Virginia. Until recent years there has been little recognition given to college-level programs of less than four years, which prepare persons to move directly into job opportunities. Present efforts to establish technical colleges in Virginia indicate an awakening to the increasing pressures for trained personnel at levels below the bachelor's degree.

Counseling

Clinch Valley College was the only state-controlled two-year institution employing a professional counselor in the Fall of 1964. Several other state-controlled two-year colleges have plans to provide more comprehensive counseling services in the near future but, at present, this is a general and pressing need throughout the State. The excellent counseling services offered by most of the privately controlled colleges provide a sharp contrast to the situation in state-controlled institutions.

Student Activities

As in the case of counseling, facilities for student activities vary greatly between state-controlled and privately controlled institutions. The privately controlled institutions are fairly uniform in their generous provision of space for student activities. Most of the state-controlled colleges are in need of space and facilities for student activities. In fact, most state-controlled institutions even have a very limited amount of lounge space for use by students between classes or at the end of the day.

Faculty

Age, Sex, and Length of Service

Data on age, sex, and length of service for all faculty members in the state-controlled and privately controlled two-year institutions are summarized in Tables 20 and 21. These data show some interesting relationships between the relatively new state-controlled two-year colleges and the well established privately controlled two-year institutions.

No state-controlled institution has a faculty with less than 50 per cent male members. There are seven privately controlled colleges (all colleges for women) with men constituting less than 50 per cent of the faculty members.

As contrasted with the six state-controlled colleges which have faculties with a median age of thirty-five years or less, there is only one privately controlled institution which has a faculty with a median age lower than thirty-five years. The differences in ages between the faculties of

Table 20. SEX AND AGE OF ALL FACULTY MEMBERS IN EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Sex		Age[a]			Total No. Faculty Members
	Per Cent Male	Per Cent Female	Low	Median	High	
State-Controlled						
Clinch Valley College	82.6	17.4	24	43	70	23
Eastern Shore Branch	63.6	36.4	24	30	56	11
George Mason College	70.0	30.0	24	41½	66	30
Lynchburg Branch	50.0	50.0	29	35½	42	2
Patrick Henry College	57.1	42.9	27	34	64	7
Clifton Forge-Covington Com. Col.	77.8	22.2	22	29	65	9
Danville Community College	64.3	35.7	23	47	67	14
Roanoke Technical Institute	96.2	3.8	23	30	59	26
Wytheville Community College	69.2	30.8	24	35	60	13
Christopher Newport College	82.8	17.2	24	38	61	29
Richard Bland College	60.0	40.0	23	34	65	20
All State-Controlled	75.0	25.0	22	35	70	184
Privately Controlled						
76	73.8	26.2	21	36	66	42
27	37.5	62.5	23	34½	61	40
41	28.1	71.9	22	45½	68	32
64	14.3	85.7	22	42½	63	14
28	35.1	64.9	23	40	68	37
82	75.0	25.0	24	40	65	12
60	36.0	64.0	23	37½	67	25
45	40.0	60.0	28	37	69	30
83	62.5	37.5	23	40½	72	40
73	14.3	85.7	23	47½	68	28
81	59.1	40.9	26	36½	63	22
All Privately Controlled	44.1	55.9	21	39	72	332
All Two-Year Colleges	55.3	44.7	21	38	72	506

[a] Median age is calculated from ungrouped data; that is, the figure shown is for the median of all faculty members, not for the median of the institutional medians.

Table 21. LENGTH OF SERVICE AND TOTAL NUMBER OF FACULTY MEMBERS IN EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Years of Service This Institution			Years of Service Higher Education			Total No. Faculty Members
	Low	Med.[a]	High	Low	Med.[a]	High	
State-Controlled							
Clinch Valley College	0	5	11	0	7	50	23
Eastern Shore Branch	0	0	1	0	0	5	11
George Mason College	0	1	11	0	5	20	30
Lynchburg Branch	2	2	2	4	4	4	2
Patrick Henry College	0	2	2	0	2	5	7
Clifton Forge-Covington Com. Col.	0	0	7	0	1	23	9
Danville Community College	0	4.5	19	0	7.5	39	14
Roanoke Technical Institute	0	.5	3	0	1	11	26
Wytheville Community College	0	1	2	0	1	13	13
Christopher Newport College	0	1	3	0	2	15	29
Richard Bland College	0	1	3	0	1	29	20
All State-Controlled	0	1	19	0	2	50	184
Privately Controlled							
86	0	4	24	0	4	26	25
30	0	4	35	0	8	35	28
78	0	2.5	33	0	3	33	12
98	0	2.5	35	0	3	38	40
94	0	5	34	0	6	34	30
63	0	8	36	0	11	40	37
75	0	6	35	0	7	38	32
64	1	4.5	37	1	6.5	37	22
79	0	2	12	0	4	29	40
97	0	2	10	0	3	38	42
48	0	6.5	37	0	6.5	37	14
All Privately Controlled	0	3	37	0	5	40	322
All Two-Year Colleges	0	2	37	0	4	50	506

[a] Median calculated from ungrouped data.

the state-controlled and privately controlled two-year colleges appears again when length of service is considered. An analysis of the figures on total years of service in higher education shows that only three of the privately controlled institutions have a median lower than four years, whereas there are just three state-controlled colleges whose medians for total service reach a level as high as four years. In years of service at the institution where they are now employed, only two state-controlled colleges have faculties with a median higher than two years; only two privately controlled institutions have a median as low as two years.

A college in which more than one-half of the instructional staff have been at the institution two years or less bears a heavy responsibility for orientation of new faculty members; this situation exists in nine of the state-controlled two-year colleges. An equally serious responsibility for in-service training is experienced in a college which has a faculty with more than one-half its members having served two years or less in higher education; seven state-controlled two-year institutions are in this position.

Academic Qualifications and Salaries

Table 22 presents information concerning the highest degree earned by members of the state-controlled and privately controlled two-year colleges. This table shows that the percentage of the total faculty members who have earned doctor's and master's degrees are about the same in the state-controlled and privately controlled institutions. Adding the

Table 22. NUMBER AND PERCENTAGE OF FACULTY MEMBERS IN EACH TWO-YEAR COLLEGE HAVING EACH LEVEL OF HIGHEST DEGREE EARNED, FALL, 1964

Institution	Doctorate		Professional and Master's		Bachelor's and Others		Total Number Faculty Members
	Number	Per Cent	Number	Per Cent	Number	Per Cent	
State-Controlled							
Clinch Valley College	2	8.7	17	73.9	4	17.4	23
Eastern Shore Branch	-	-	10	90.9	1	9.1	11
George Mason College	11	36.7	15	50.0	4	13.3	30
Lynchburg Branch	-	-	2	100.0	-	-	2
Patrick Henry College	1	14.3	5	71.4	1	14.3	7
Clifton Forge-Covington Com. Col.	2	22.2	4	44.5	3	33.3	9
Danville Community College	-	-	11	78.6	3	21.4	14
Roanoke Technical Institute	-	-	7	26.9	19	73.1	26
Wytheville Community College	-	-	8	61.5	5	38.5	13
Christopher Newport College	3	10.4	21	72.4	5	17.2	29
Richard Bland College	2	10.0	12	60.0	6	30.0	20
Total Faculty Members - State-Controlled	21	11.4	112	60.9	51	27.7	184
Privately Controlled							
62	-	-	16	57.1	12	42.9	
46	-	-	26	65.0	14	35.0	
21	1	4.5	20	91.0	1	4.5	
92	-	-	4	33.3	8	66.7	
87	3	7.5	22	55.0	15	37.5	
51	-	-	29	78.4	8	21.6	
30	4	9.7	28	66.7	10	23.8	
99	-	-	15	60.0	10	40.0	
79	-	-	9	64.3	5	35.7	
32	1	3.1	26	81.3	5	15.6	
70	3	10.0	21	70.0	6	20.0	
Total Faculty Members - Privately Controlled	12	3.7	216	67.3	93	29.0	321
Total Faculty Members - All Institutions	33	6.5	328	64.8	144	28.7	505

numbers for the two levels of degrees, and computing the sum as a percentage of total faculty, yields a figure of 70. 8 per cent for the privately controlled institutions and 72. 3 per cent for the state-controlled colleges. When doctor's and master's degrees are considered separately, five of the state-controlled colleges are found to have faculties with 10 per cent or more holding an earned doctorate. This is in contrast with only one privately controlled institution which has employed a faculty with 10 per cent of its members having earned doctor's degrees. Since 21 of the 184 faculty members in the state-controlled colleges have earned the doctorate as contrasted with 12 of the 322 faculty members at the privately controlled institutions, some difference in median salary levels could be anticipated. The general conclusion should be drawn that the two-year colleges in Virginia in practically all cases have faculty members with adequate academic qualifications.

Salary information for all two-year institutions, state-controlled and privately controlled, is summarized in Table 23. Higher salary scales at state-controlled institutions are indicated by contrasting median salaries. The highest median salary of all the privately controlled institutions is $6, 255 on a 9-10 month basis; seven of the state-controlled institutions show higher medians, two of them more than $1, 000 higher. Although one privately controlled college has a top salary beyond that of any state-controlled institution, top salaries in the privately-controlled institutions are generally below those in the state-controlled colleges. Lest too much emphasis be focused on salary, it should be noted that the

Table 23. TOTAL NUMBER AND SALARY OF FULL-TIME (9-10 MONTHS) FACULTY MEMBERS IN EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Number of Full-time (9-10 mos.) Faculty Members[a]	Salary (9-10 mos.)		
		Low	Median	High
State-Controlled				
Clinch Valley College	17	$5600	$7800	$9200
Eastern Shore Branch	7	5600	6200	6200
George Mason College	13	6500	7500	9400
Lynchburg Branch	2	6600	6600	6600
Patrick Henry College	5	6200	6200	7200
Clifton Forge-Covington Com. Col.	6	5800	6850	7900
Danville Community College	8	4600	7250	9400
Roanoke Technical Institute	13	6000	6300	7900
Wytheville Community College	12	5800	6600	7700
Christopher Newport College	17	5100	6500	7700
Richard Bland College	15	5100	6200	7700
Totals - State-Controlled	115	$5600	$6700	$9400
Privately Controlled				
55		$1800	$2940	$4230
26		3839	4784	5239
52		5000	5800	6500
68		5000	5500	6400
48		3244	5600	8100
58		6000	6100	6100
57		Not Available		
70		4000	5675	6800
49		5202	6255	9708
39		4800	5500	6900
65		4850	5650	8500
Totals - Privately Controlled	228	$1800	$5750	$9708
Totals - All Two-Year Colleges	341	$1800	$6000	$9708

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[a] Only faculty members whose salaries were reported to the Commission are included in this table.

existence of various "fringe benefits" at the privately controlled institutions makes it impossible to evaluate precisely total remuneration for services performed.

Academic Rank

Academic rank in the state-controlled two-year colleges of the University of Virginia and Virginia Polytechnic Institute is awarded by the parent institutions. The branches of The College of William and Mary are authorized to award academic rank with the approval of the Coordinator in the parent institution. The information summaried in Table 24 for the state-controlled institutions shows that most of the faculty members in these relatively new institutions are in the lower ranks. The fact that a majority of the faculty members are in the lower ranks is consonant with their limited experience and preparation. Only four of the privately controlled colleges have systems of academic rank, so no data are presented for these institutions.

Sources of Faculty and Means of Selection

The major sources for faculty reported by directors and presidents of two-year colleges are: (1) recent products of graduate schools in Virginia and other states and (2) faculties of other colleges and universities. No other sources were reported by more than one-half of the 22 institutions responding. Ten colleges reported employment of teachers from schools of less than college grade and eight institutions indicated

Table 24. PERCENTAGE OF ALL FACULTY MEMBERS HOLDING EACH ACADEMIC RANK IN EACH STATE-CONTROLLED TWO-YEAR COLLEGE, FALL, 1964

Institution	Professor		Associate Professor		Assistant Professor		Instructor		Lecturer		Total No. Faculty Members
	No.	%	No.	%	No.	%	No.	%	No.	%	
Clinch Valley Col.	3	13.0	4	17.4	9	39.2	4	17.4	3	13.0	23
Eastern Shore Br.	-	-	-	-	2	18.2	9	81.8	-	-	11
George Mason Col.	1	3.3	6	20.0	8	26.7	5	16.7	10	33.3	30
Lynchburg Branch	-	-	-	-	2	100.0	-	-	-	-	2
Patrick Henry Col.	-	-	1	14.2	3	42.9	3	42.9	-	-	7
Clifton Forge-Covington Com. Col.	1	11.1	1	11.1	1	11.1	4	44.5	2	22.2	9
Danville Com. Col.	1	7.1	4	28.6	1	7.1	4	28.6	4	28.6	14
Roanoke Tech. Inst.	-	-	2	7.7	3	11.5	11	42.3	10	38.5	26
Wytheville Com. Col.	1	7.7	-	-	2	15.4	10	76.9	-	-	13
Christopher Newport College	-	-	1	3.4	4	13.8	12	41.4	12	41.4	29
Richard Bland Col.	-	-	1	5.0	5	25.0	10	50.0	4	20.0	20
Totals	7	3.8	20	10.9	40	21.7	72	39.1	45	24.5	184

retired military personnel as a source of faculty.

Selection of faculty members in the state-controlled two-year colleges is usually performed by the directors and/or the coordinators for community colleges in the parent institutions. In some instances, chairmen of departments in the parent institution are active in recruiting. In most cases the academic deans and department chairmen at the parent institutions must approve candidates for selection. Visits to the main campuses for interviews are not uncommon. There is, however, a wide range of difference in the degree of control exercised by the three parent institutions in the appointment of faculty. Some state-controlled two-year colleges are given almost complete autonomy in the selection process, while other branches have very little to say about the choice of their new faculty members.

In the privately controlled two-year colleges selection of faculty members is usually performed by the president and the academic dean; when there is a department head, he is usually included in the selection process.

Promotion and Tenure

Four criteria for promotion of faculty in rank or salary are considered very important by ten or more of the two-year institutions: (1) excellence as a classroom teacher; (2) achievement of a higher degree; (3) value to the institution in services other than teaching, research, and publication; and (4) length of service at the institution. Excellence as a classroom teacher and achievement of a higher degree were the criteria most frequently applied. Although tenure is not authorized at most of the two-year colleges, it appears to be widely accepted in principle, and Virginia Polytechnic Institute has announced agreement with the American Association of University Professors on this subject. Three years was the period most frequently mentioned as the length of service before tenure should be awarded.

Instructional Facilities

Table 25 summarizes data for the state-controlled and privately controlled two-year colleges on acreage of plant and numbers of buildings, class and lecture rooms, science laboratories, and other instructional rooms. An analysis of the data in Table 25 shows that the privately controlled colleges have more than five times as many buildings (dormitories account for part of this difference) and almost twice as many classrooms as the state-controlled institutions; but this ratio does not hold for science laboratories. The recent emphasis on science and technology is probably accountable for the fact that the state-controlled colleges have almost exactly the same number of science laboratories as the privately controlled institutions.

Data on space utilization for state-controlled two-year colleges are presented in Table 26. Analysis of these data reveals that fewer than one-half of the state-controlled institutions reach the median score levels of the normative utilization figures entered in the last two lines of Table

Table 25. ACREAGE OF PLANT, NUMBER AND AREA OF BUILDINGS, AND NUMBER OF INSTRUCTIONAL ROOMS IN EACH TWO-YEAR COLLEGE, FALL, 1964

Institution	Acreage of Plant	Number of Buildings Permanent and Temp.	Number of General Classrooms[b]	Teaching Laboratories[b]	Number of Other Instructional Rooms[c]	Total Enrollment All Students
State-Controlled						
Clinch Valley College	320	4	13	4	1	301
Eastern Shore Branch	153	3[a]	6	5	-	103
George Mason College	150	4	15	6	-	354
Lynchburg Branch	.5	1	2	2	1	57
Patrick Henry College	1	1	5	1	-	114
Clifton Forge-Covington Community College	167	1	7	6	-	185
Danville Community College	50	1	6	6	-	265
Roanoke Tech. Inst.	16	3	6	12	-	332
Wytheville Community College	6	1	4	4	-	257
Christopher Newport College	75	2	9	3	1	804
Richard Bland College	200	3	10	5	-	542
Totals - State-Controlled	1138.5	24	83	54	3	3314
Privately Controlled						
30	65	13	18	4	12	357
67	30	14	20	2	6	310
39	10.5	5	18	4	12	498
53	24	14	22	2	-	291
23	44	5	11	3	1	379
97	6	5	13	3	2	165
50	72	7	15	3	2	367
36	17	8	19	4	5	470
49	700	47	21	7	2	814
35	13	14	17	5	10	474
47	10	5	11	1	2	59
Totals - Privately Controlled	991.5	137	185	38	54	4664
Totals - All Two-Year Colleges	2130	161	268	92	57	7978

[a] The Eastern Shore Branch is located on the site of a World War II Military Housing Project which includes a total of 49 buildings.

[b] Figures for state-controlled institutions taken from Instructional Space Utilization Study for the Fall, 1964, published by the Virginia State Council of Higher Educatio

[c] "Other Instructional Rooms" include Seminar Rooms and Teaching Auditoriums as listed in the study referred to in footnote "b" of this table.

Table 26. SPACE UTILIZATION INFORMATION FOR STATE-CONTROLLED TWO-YEAR COLLEGES FALL, 1964[a]

Institution	Average Number of Periods Per Week Per Room		Average Number Of Student Hours Per Week Per Station		Percentage of Student-Stations Used When Rooms Were in Use	
	General Class-rooms	Teach-ing Labs.	General Class-rooms	Teach-ing Labs.	General Class-rooms	Teach-ing Labs.
Clinch Valley College[b]	13.5	17.5	7.0	9.5	48.2	51.8
Eastern Shore Branch	16.2	7.2	7.1	5.2	41.9	63.5
George Mason College	14.8	10.8	8.5	9.6	52.4	66.5
Lynchburg Branch[b]	20.5	9.0	15.7	7.8	70.5	63.8
Patrick Henry College	29.6	40.0	12.8	17.0	46.7	42.5
Clifton Forge-Covington Com. Col.	8.0	10.2	3.8	6.8	47.2	62.8
Danville Community College	16.8	10.0	13.0	5.9	79.4	62.2
Roanoke Technical Institute	22.8	14.4	12.3	9.3	57.4	59.1
Wytheville Community College	23.0	22.8	15.3	15.8	64.0	63.6
Christopher Newport College[c]	24.6	25.2	14.9	15.9	61.3	61.5
Richard Bland College	24.4	13.0	14.9	7.3	59.3	47.8
Median Score 1956[d] (Junior Colleges Only)	21.2	20.5	12.4	13.8	62.3	67.0
Median Score 1960[e] (Junior Colleges Only)	22.9	18.7	12.6	12.5	65.1	72.9

[a] Information on space utilization has been taken from Virginia Publicly-Supported Institutions of Higher Education, Instructional Space Utilization Study for the Fall, 1964, published by the Virginia State Council of Higher Education.

[b] Seminar room not included.

[c] Auditorium not included.

[d] As reported in the Manual of Studies of Space Utilization in Colleges and Universities, published by the American Association of Collegiate Registrars and Admissions Offices.

[e] As reported in Normative Data on the Utilization of Instructional Space in Colleges and Universities, published by the American Association of Collegiate Registrars and Admissions Offices.

26. This relatively low utilization in a majority of these institutions is related in some cases to new facilities designed for an expanding enrollment, and in other cases to a short period of operation.

With one or two exceptions, the two-year state-controlled colleges have enough instructional rooms for their present enrollments. Some of them could expand enrollments considerably without requiring more classrooms and laboratories, by utilizing their present facilities more fully. In most cases the increases in enrollments that are foreseen by the officials of the two-year colleges will require additional instructional rooms in the next 10 or 15 years.

Because most of the state-controlled institutions have shown foresight in acquiring sites of substantial size, opportunities for expanding physical plants are excellent. Furthermore, those colleges which do not now possess adequate acreage have already taken steps to secure additional property.

Faculty Offices

The provision of office space for faculty members is a problem in most two-year colleges in the state. Only one state-controlled two-year college and one privately controlled institution have individual offices for all faculty members. Most of the colleges reported that efforts are being made to provide more and better facilities for faculty offices.

Libraries

Table 27 shows library information for the state-controlled two-year colleges including number of volumes, circulation data, and number of professional librarians. The table indicates a low number of books, low circulation, and no professional librarians in the majority of the libraries of the state-controlled two-year institutions. It is apparent that the building of library collections in most of the state-controlled colleges has not had adequate emphasis.

Table 28 includes information on the privately controlled two-year college libraries. The high, low, and median number of volumes and the high, low, and median number of volumes per student are presented in this table. The data on Tables 27 and 28 show that there are only three libraries in the state-controlled colleges which have as many volumes as the privately controlled institutions with lowest number of volumes. There are, however, five state-controlled institutions which have more volumes per student than the privately controlled college with the lowest number per student. A detailed analysis of library facilities will be presented in a separate report, Staff Report #9.

Other Two-year Institutions

In addition to the facilities discussed in the previous section, two types of institutions should be considered in the total picture of education beyond the high school and below the degree-granting level in Virginia. The following sections will describe the present facilities of area vocational-

Table 27. LIBRARY VOLUMES PER STUDENT (TOTAL ENROLLMENT) AND CIRCULATION DATA FOR EACH STATE-CONTROLLED TWO-YEAR COLLEGE

Institution	Total Enrollment Fall, 1964	Number of Volumes Fall, 1964	Volumes Per Student Fall, 1964	Circulation Data 1963-64	Circulation Per Student[d] 1963-64	Full-Time Professional Librarians Fall, 1964
Clinch Valley College	301	19,907	66.2	5,994	22.4	1
Eastern Shore Branch	103	6,300[a]	61.2	N.A.[b]	-	1[c]
George Mason College	354	12,793	36.1	2,300	13.5	1
Lynchburg Branch	57	3,720	65.3	N.A.	-	0
Patrick Henry College	114	4,396	38.6	651	11.0	0
Clifton Forge-Covington Com. Col.	185	500	2.7	N.A.	-	0
Danville Community College	265	2,000	7.5	800	3.3	0
Roanoke Technical Institute	332	2,200	6.6	N.A.	-	0
Wytheville Community College	257	1,625	6.3	N.A.	-	0
Christopher Newport College	804	12,913	16.1	2,321	3.8	1
Richard Bland College	542	8,547	15.8	3,427	8.2	1
Medians-For Those Institutions Reporting	-	4,396	16.1	2,310	-	-

[a] Approximately 5,500 of these volumes belong to the National Aeronautics and Space Administration and are scientific in nature.

[b] N.A. indicates information not available.

[c] The librarian reported for the Eastern Shore Branch is employed by the National Aeronautics and Space Administration.

[d] Circulation per student was computed using enrollment figures for the fall term 1963.

Table 28. LIBRARY VOLUMES PER STUDENT (TOTAL ENROLLMENT) IN THE PRIVATELY CONTROLLED TWO-YEAR COLLEGES, FALL, 1964

Range	Number of Volumes in 1964	Volumes Per Student in 1964
High	26,700	335[a]
Low	8,661	17
Median	15,233	39

[a] The high, low and median volumes per student figures are not necessarily from the same institutions for which high, low and median number of volumes are listed in the left hand column.

technical schools and discuss the technical colleges which are now in the process of development.

Area Vocational-Technical Schools

There are nine area vocational-technical schools in Virginia which are in cooperation with the Vocational Division of the Virginia State Department of Education. Five are operated by local school boards and four function in cooperation with four-year degree-granting institutions. Of the five not operated in conjunction with four-year colleges one is adjacent to Danville Community College, and four are operated as separate schools. Table 29 shows the name, location, date established, and program titles for each area vocational-technical school.

Most of the area vocational-technical schools are planned to meet the needs of persons within a wide range of educational experience. Applicants are accepted from three categories: (1) high school graduates, (2) those who are over 16 years of age but have no diploma from a secondary school, and (3) adults. In some of the schools, such as Danville Technical Institute, a majority of those enrolled are high school graduates. In others, such as the Wise County Vocational-Technical School, most of the students are in programs at the high school level.

Technical Colleges

The General Assembly of Virginia, at its 1964 regular session, created the State Board of Technical Education. The Board was charged

Table 29. LOCATION, DATE ESTABLISHED, AND PROGRAMS OFFERED BY AREA VOCATIONAL-TECHNICAL SCHOOLS[a]

Name and Location of School	Courses Offered																												
	Vocational (Trade)																		Technical							Business			
	Auto Body Repair	Auto Mechanics	Barbering	Carpentry	Cosmetology	Diesel Mechanics	Drafting	Electricity	Food Trades	Machine Shop	Masonry	Needle Trades	Practical Nursing	Printing	Instrumentation	Sheet Metal	Voc. Electronics	Welding	Air Condit. & Refrig.	Drafting & Design	Electricity	Electronics	Electrical Drafting	Civil & Highway Tech.	Nuclear Electronics	General Business	Stenography	Bookkeeping	Accounting
Danville Technical Institute Danville, Va., Est. 1945	X	X			X					X			X						X	X		X							
New River Vocational-Technical School Radford, Va., Est. 1959										X			X		X					X	X	X							
Richmond Professional Institute School of Engineering Technologies Richmond, Va., Est. 1957																			X	X	X	X	X	X					
Technical Institute of Old Dominion College Norfolk, Va., Est. Date Unknown		X																	X	X		X			X				
Virginia State College School of Industries Petersburg, Va., Est. 1944		X	X		X			X			X						X		X										
Virginia State College School of Industries Norfolk, Va., Est. 1947		X		X				X	X		X	X					X			X		X							
Washington County Vocational-Technical School Abingdon, Va., Est. 1949	X	X			X	X		X		X	X																		
Valley Vocational-Technical School Fishersville, Va., Est. 1947	X	X			X					X										X						X	X	X	X
Wise County Vocational-Technical School Wise, Va., Est. 1944	X	X		X	X		X	X		X	X		X			X	X	X											

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[a] The information in this table was taken primarily from Virginia Department of Education, "Industrial Education - Its Role in Virginia's Economic Progress," Informational Service Bulletin, No. 8, Richmond, 1963.

with developing, administering, and supervising new area vocational and technical schools established by the State and other technical programs authorized by the General Assembly. Thus far, the Board has been mainly concerned with the establishment of new technical colleges.

The technical colleges which are to be established will provide a variety of opportunities to include programs for (1) technicians, (2) employed adults, (3) college credit students, and (4) craftsmen. At this time three locations have been identified by the State Board of Technical Education as area sites for new technical colleges. The approved areas are: (1) a temporary site in the corner of Fairfax County near Arlington, also near Alexandria and in the center of population in the Northern Virginia area; (2) between U. S. Route 1 and Interstate 95 one-quarter of a mile south of the intersection of U. S. Route 1 and State Highway 10; and (3) in the Harrisonburg-Staunton-Waynesboro-Rockingham County area. These colleges will not assume their full role in the total picture of higher education in Virginia until 1966.

CHAPTER V

PROBLEMS AND POLICIES IN ORGANIZING AND MAINTAINING AN ADEQUATE "STATE-WIDE SYSTEM OF COMPREHENSIVE COMMUNITY COLLEGES"

Possible Types of Two-Year State-Controlled Post-High School Institutions

The distinctive role of two-year community colleges has already been noted. As expressions of different educational philosophies and in response to different needs and purposes, several types of post-high school two-year institutions have been established in the United States. Each has merits and limitations that need to be taken into account in arriving at recommendations for the establishment of a "state-wide system of comprehensive community colleges" in Virginia. With this fact in mind, consideration is given here to the nature and functions of comprehensive community colleges, vocational-technical colleges, two-year branches of state colleges and universities, and post-high school vocational programs.

The Two-Year Community College

The characteristics of the community junior college and the multiple functions it may perform briefly summarized are:

1. One function of the community junior college is to offer courses paralleling those given in the freshman and sophomore years of degree-granting institutions, thereby preparing qualified students for upper division courses elsewhere. When junior colleges were first established, their chief purpose was to offer two years of college-parallel courses acceptable to the universities. Even though the programs of the community junior colleges have been

expanded, this important function has not been diminished.

2. The community junior college also provides general education both for students who will not advance beyond the junior college level and those who are pursuing vocational-technical programs. This is an important function because it means preparing individuals to become responsible citizens. Technical education must be interwoven with general education otherwise the separation of different kinds of education will lead to a stratified society.
3. The community junior college assumes major responsibility for vocational-technical education. The trend is definitely toward the comprehensive community junior college which includes both college-parallel courses and vocational-technical courses. In such a comprehensive program students may move from a vocational-technical program to an academic program, or conversely, without the necessity of changing institutions.
4. The community junior college emphasizes the education of adults. This it may do by offering daytime or evening programs or both. The reasons why adults seek further educational opportunities are many. Some want to prepare to earn a better livelihood, others want to prepare to transfer to a senior institution and others seek to advance their own general education. There is also the important function of retraining and of updating the education of persons in various occupational fields. The community junior college may

also provide suitable classrooms and laboratories where extension classes offered by degree-granting institutions in evenings may meet, and it may serve effectively as the coordinating agency within its community for the programs of extension courses offered by outside institutions.

5. A community junior college operates under an open door admissions policy. This means that generally any high school graduate is eligible for admission, and in many community colleges individuals over 18 years of age who can profit from the college's program are admitted without fulfilling formal entrance requirements. But the acceptance of the student does not assure him that he is eligible to enroll in all courses and curriculums offered. Quite to the contrary, some programs within community colleges are highly selective because they require special abilities and skills.
6. The community junior college, to perform its multiple services effectively, must provide good counseling and guidance services. Students entering community junior college, like some who enter degree-granting institutions, may have very unrealistic ideas of their abilities and their goals. Their ambitions may far outreach their competencies. The community junior college is responsible for helping such students to achieve a self-understanding on the basis of which to make realistic educational plans.
7. Community junior colleges or their equivalent should be located so that all, or practically all of the state's potential students, are within commuting distance of such a facility. This is not an unrealistic goal. In fact, several states have already virtually achieved it.
8. A community junior college should be intimately related to the community in which it is located. The needs of the community should be identified and citizens of the community should participate in

program planning, program development, and in determining the services that the institution can render to the community. Its programs will include forums, concerts, art exhibits, and cultural activities of various types.

9. The state, the community, and the students in varying degrees share the cost of community junior college education. In some states the community and the students are the chief source of support. In others, the primary source is the state. Whatever the source, adequate financial support of a permanent nature is essential to the stability and success of a community junior college. While policies of financing community junior colleges vary from state to state, several conclusions appear to be supported by the experiences of other states, viz: the local community should bear a share of the cost commensurate with its resources; the state should supplement local resources to the extent necessary to provide a diversified program of high quality; tuition and fees should be kept low so as to provide a maximum opportunity to all qualified students; insofar as tuition charges and fees become a barrier to students, scholarships and other forms of financial aid should be made available.

Technical Colleges

The technical college is designed primarily for high school graduates and adults who need and can profit by technical training. There is a rapidly growing demand for persons who possess competencies beyond those that can be gained in high school but who, for justifiable reasons, cannot complete a professional program in engineering, business, industry, nursing, or other fields leading to a degree. The graduate of a two-year technical program possesses competencies and skills that enable him to relieve the professional practitioner of many responsibilities that are semiprofessional in nature. More often than not the nature of these functions requires the technologist to have a good foundation in the humanities, the arts, the sciences, and mathematics, and also to have a wide variety of laboratory experiences that develop his skills with tools, instruments, and equipment.

The State of Virginia is well on the way to the establishment of a number of technical colleges. The General Assembly in 1964 created the State Board of Technical Education, which has adopted regulations for the establishment of technical colleges throughout the state and has published a well-conceived and sound "Guide for the Establishment of Technical Colleges in Virginia." In fact, the programs presented in the Guide are so broad in nature that a technical college patterned along the lines suggested would meet most of the criteria for a community junior college. As stated in the Guide the program of the technical college is designed for the

> "High School graduate who is capable of becoming, and desires training, as technician, highly skilled craftsman and other semiprofessional specialists requiring specialized study beyond the high school but whose objectives are below the professional level.

> The public school drop-out who might return for special training, up-grading or re-training vocational and/or general education programs of whatever level appropriate to his ability and his needs.
>
> The high school graduate who goes to work or becomes a homemaker on graduation but has educational needs that can be met in night classes.
>
> The older citizen, who for personal or vocational reasons, desires educational opportunities."

The Guide adds

> "... it may be for the high school graduate who plans to attend college but who would prefer to live at home..."

or for

> "The high school graduate who is capable of and prepared for the first two years of college-level work but will not enroll in a resident college for whatever reason."

With reference to technician programs the Guide says

> "The various curricula that may be provided in this program are usually two years in length. Those completing the requirements of a technician curriculum will be awarded an 'Associate in Applied Science' degree.
>
> The usual curriculum pattern for the technician programs provide that a considerable portion of the work of the first two terms consists of basic science, mathematics and drawing together with some special technology. Foundations must be laid for the more advanced courses.
>
> The major fields listed, Engineering and Industrial Technologies, Medical and Health Technologies, Agricultural, Business, Service Technologies, and other fields - all have their specialities."

The programs outlined in the Guide reflect a sound educational philosophy. As already noted, they are so broadly conceived that in many respects they have the characteristics of a community junior college program. This point of view is well justified. Many technical colleges have had to learn by experience that their programs must embody some basic general education courses to provide a foundation for technical education and also to equip technicians with competencies for their citizenship responsibilities.

Clearly the technical college, as conceived by the State Board of Technical Education, and the comprehensive community college as here described, have so much in common that it would be unwise to develop them as separate units, or as separate systems within the Commonwealth.

The Two-Year Branch of a State College or University

Until the Board of Technical Education recently embarked on a plan for the establishment of two-year area technical colleges, the two-year branches of the state colleges and universities came closest to representing the equivalent of public junior colleges in Virginia.[1] Currently there are 11 of these two-year colleges, each operating under the auspices of a parent institution as follows:

University of Virginia -- Clinch Valley, Eastern Shore, George Mason, Lynchburg, Patrick Henry

Virginia Polytechnic Institute -- Clifton Forge, Danville, Roanoke, Wytheville

William and Mary -- Christopher Newport, Richard Bland

The merits and limitations of two-year branches in fulfilling the educational needs of large numbers of post-high school youths must be considered in some detail because Virginia is at the crossroads in educational planning and must decide on the direction in which it will go.

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[1] As noted earlier in this Report, the extension "centers" maintained by certain state-controlled institutions are treated in a separate Report.

Throughout the nation there are many branches of state colleges and universities. Some provide two years of education, others offer courses beyond the first two years even to the graduate level. Some provide primarily adult education and extension courses; others, more strictly academic, confrom closely to the offerings of the parent institution. Some offer comprehensive programs including terminal general education courses, or terminal programs of the vocational-technical type. Some are rigorously controlled by the administration of the parent institutions; others enjoy a fair degree of administrative autonomy. Some derive their major financial support through budget provisions of the parent institution, while others depend largely on auxiliary enterprises, tuition, and voluntary sources of local support. Most branches apply the same criteria for admission that obtain on the main campus but in some of them variations from the main campus standards are permitted.

The chief advantages claimed for the branch arrangement are:

1. The branch extends the reaches of the university and makes available to students who could not come to the main campus or who could not be accommodated there essential parts of the university program. Students at the branch, and also local townspeople, enjoy a certain status from their connection with a more or less prestigious parent university.
2. The programs offered in branches present no problem of accreditation since they are given under the aegis of a parent institution that is already accredited. Courses taken in the

branches usually can be transferred to the main campus and can be fitted into an organized program leading to a degree. Apparently the accrediting agencies make no inquiry as to the quality of the program in the branch, so the ethics of extending accreditation privileges to the branch may be questioned.

3. Standards in the branches, comparable to those on the main campus can be maintained through close, continuous supervision by responsible officers in the parent institution. Policies in the branches governing the admission of students, the minimum level of acceptable academic performance, and general standards of conduct usually conform to those of the parent institution.
4. Faculty members can be employed under conditions of salary, tenure, and perquisites that give assurance of quality instruction comparable to that on the main campus. Some young teachers of good quality seem more easily attracted by an offer of a faculty position in a branch of a well-known university than by the offer of a similar position in a separate two-year college.
5. The branches provide a means of reducing student congestion on the main campus and of identifying those who, by virtue of interest and ability, should be encouraged to pursue advanced study. The branch program, if properly organized, can provide an honorable terminus by granting the degree of Associate in Arts or Associate in Science to those whose records are

satisfactory but who for some reason cannot enter upon further study.

6. The branch affords an opportunity to try out new courses or other innovations. There is usually less opposition to academic change in a branch than there is on the main campus. The Virginia institutions seem not to be using their branch colleges for this purpose.
7. Appropriations for the support of the branch are usually incorporated in the budget of the parent institution, thereby giving assurance of reasonably ample and stable support.
8. The academic "know-how" of the staff members of a well-established university is of advantage in the initial formation of a new two-year college. A new institution, however, may readily obtain such advice from staff members of a strong university without the necessity of becoming a branch.
9. The maintenance of branches at several locations scattered throughout the State away from the main campus is believed by some of the parent institutions to be advantageous in broadening the base of their political support, particularly in getting needed appropriations from the state legislature.

There are some basic issues regarding this arrangement, however, that must be considered before arriving at any conclusion about its place in a system of higher education. Some of these briefly summarized are:

1. The college or university branch is usually oriented to the parent institution. It may be located in a community but not really be a part of the community. The usual arrangement of absentee administration tends to give the people of the community less feeling of participation in the plans of the college than when the college operates under a local administration.
2. There are decided disadvantages arising from the administration of a branch by officers on the main campus. Some that have been discovered in the course of institutional visits in Virginia were: great delays in getting decisions and in obtaining materials that are needed; the requirement of complete conformity of procedures in a branch to those established on the main campus even though they may not always be appropriate; the requirement that administrators in the branch deal with their counterparts in the parent institution often involving many different contacts. One notable example is that as a rule every faculty appointment in a two-year branch must clear through designated channels on the main campus. Delays in giving clearance at times have worked to a serious disadvantage of the branch.
3. The educational programs of the branches are prescribed by departments or other administrative units in the parent institutions.

Usually, they must, therefore, conform closely to those offered on the main campus. Under these conditions there is often too little flexibility to permit adaptation of programs to community needs. A cursory examination of the total semester hours of courses announced in the state-controlled two-year colleges in Virginia in 1964-65 shows that more than 80 per cent of the offerings were in the conventional academic departments and that more than 50 per cent were concentrated in science, mathematics, and engineering. The humanities and social sciences combined constituted only about 40 per cent of the total offerings. A limited number of hours in general business and accounting were offered in most of the 11 branches, but terminal occupational courses were offered in only four. More extensive terminal occupational courses are offered in seven of the 12 privately controlled junior colleges. The courses offered in the state-controlled two-year colleges are intended to be of comparable quality to their counterparts on the main campus.

The degree to which conformity is imposed on programs in the branches is illustrated by the fact that course announcements in some branch catalogs follow precisely the pattern of courses offered in the first two years of the parent institution, without regard for the demand for the courses or the availability of instructors. While such close conformity of the programs may protect standards and provide for easy transfer of credits, it does not afford the necessary flexibility to take into account the educational needs of the community in which the institution is located. An analysis of community needs will almost inevitably identify technical and semi-professional courses that are called for but that do not now appear in the offerings of the two-year branch colleges.

4. The parent institutions insist that to protect the integrity of their programs and to uphold their standards, students in the branches must conform to the established requirements on the main campus governing admission, academic achievement and probation, and general student conduct and activities. Inevitably, any considerable degree of selective admissions will close the door of opportunity to many local students who should continue their work beyond the high school, but who do not qualify for admission to the branch under the university standards. Under these conditions the branch institution does not meet major community needs.

5. The development of branch colleges throughout the state is very likely to lead to a competitive race among the major institutions to be the first to occupy a desirable location. It may also result in duplication of effort in the maintenance of two branches, by different parent institutions, each branch so located as to serve essentially the same local population as the other. This

situation has been observed in other states where branch colleges have been permitted, and it is not unknown in Virginia. The spirit of empire building is as prevalent in higher education as in other human organizations.

Conditions That Affect Plans for the Development of a "State-wide System of Two-Year Community Colleges"

In this section, further consideration is given to factors that must be taken into account in deciding on policies and procedures for the establishment of two-year community colleges and technical colleges.

In the development of plans, the intent of the General Assembly in creating the Commission on Higher Education must be kept in mind.

Senate Joint Resolution Number 30 which established the Commission, states that "In addition to such other matters as may be included in its study and report, the Commission shall consult with state institutions of higher education which operate off-campus branches, divisions or colleges, and with such state boards and departments as operate area vocational and technical schools, and shall then recommend to the Governor and the General Assembly procedures whereby such branches, divisions, colleges and schools may be consolidated into a state-wide system of comprehensive community colleges which offer post-high school education for terminal vocational and technical training, and for college-transfer programs of not more than two years duration."

The foregoing assignment is consistent with a conclusion reached by the Commission on Vocational Education in 1963 which reads: "In the long run, the State should consider the feasibility of establishing all post-high school education of less-than-degree length under a system of comprehensive community colleges operated by a single state-wide board. The proposed State Board of Technical Education and the new schools founded under its sponsorship and administration should be the nucleus for this development."[1]

Data already presented show that by 1970 Virginia will be called upon to provide educational opportunities for about 120,000 students. In 1964 the enrollment in all Virginia colleges - public and private - junior and senior - was 78,041. This means that within a six-year period provisions must be made for about 42,000 additional students.

In 1964, 70 per cent of the total college enrollment was in public institutions; it is predicted that in 1970 the public institutions will enroll about 75 per cent of the college students, an increase of about 32,000 over the 55,000 enrolled in 1964. These estimates are based on the assumption that there will be an annual increase of 1.2 per cent of the college-age population going to college, which was the average rate of increase for the nation from 1953-1964. They are also based on the assumption that the in- and out-of-state migration will be similar to that of 1964.

The actual number of students to be accommodated is likely to exceed these estimates for two reasons. First, it has been the experience of other states that the percentage of high school graduates who continue their education increases in areas where access to community colleges is made available. Second, in 1963 approximately 16,000 students, undergraduate and graduate, who were non-residents of Virginia, were enrolled in Virginia colleges and universities. But in the same year more than 26,000 Virginia residents attended higher institutions outside the State. Virginia is, therefore, indebted to other states for the education of approximately 10,000 Virginia residents. Some states are limiting the number of out-of-state students they will accept. Insofar as the tightening of state policies may affect Virginia residents, the number of Virginia students that will have to be provided for in Virginia institutions may well increase beyond the estimated 120,000 in 1970.

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[1] Vocational and Technical Education in Virginia - Present and Future Needs, Report of the Commission on Vocational Education to the Governor and General Assembly, Commonwealth of Virginia, 1963, p. 19.

In any event, provision will have to be made to enroll about 32,000 more students in public higher instituions than were enrolled in 1964. In a six-year period, public higher educational opportunities will have to expand to accommodate more students than the total increase in enrollments in public institutions in the State during the preceding 14 years, 1950-64.

It is not in the best interest of the State to undertake to provide for all of this enrollment growth in existing institutions because: first, the rapid expansion that would be required would result in enrollments of a magnitude that might jeopardize the quality of their programs; second, it would be inconsistent with the policies of the degree-granting institutions to offer programs as diversified as would be required to provide for the whole range of abilities and interests of high school graduates who seek post-high school education; third, these institutions are not so located with reference to large centers of college-age population as to provide post-high school opportunities for many students who cannot afford to "go away" to college; fourth, substantial economies both for the State and for students can be effected by establishing a system of community junior colleges to complement existing institutions.

A report on Two Year Colleges, prepared for the Illinois Board of Higher Education in December, 1963, included the following information:

> In a recent study of higher education in Illinois, McLure estimates "that the average instructional cost per full-time student equivalent for freshmen and sophomores in the biennium 1961-1963 is between \$900 and \$1,000" in all public institutions of higher education, exclusive of junior colleges. Thus he concludes, assuming a level of \$800 per student, which appears to be somewhat higher than actual expenditures in junior colleges, "the state could save from \$100 to \$300 in yearly operating costs for each full-time student who is accommodated in the junior college instead of a senior institution."
>
> The conclusion to be drawn from these studies is that it is more economical for the junior college to offer freshman and sophomore programs than it is for other institutions of higher education. Special programs in vocational and technical fields are more expensive on the average than the academic ones of comparable nature.[1]

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[1] Two Year Colleges, A Report to the Illinois Board of Higher Education, December, 1963, pp. 15-16.

In deciding whether the community junior college is needed and where it should be located, several criteria may be applied. Briefly stated they are: (1) The guiding philosophy of the State with respect to the function of community colleges must be applied. (2) There should be assurance of a minimum enrollment. There is a difference in opinion and practice on this point, but it is generally agreed that an enrollment of 400 constitutes a desirable minimum, and that it is uneconomical and undesirable to attempt to operate with an enrollment of less than 200. (3) Consideration must be given to the presence of existing institutions, public and private, within commuting distance and the extent to which their programs meet the needs of students in the area. (4) The interest of the local community must be taken into account. This may be judged by expressions of interest by responsible community organizations, by a survey of community needs and interests, and by willingness of the community to provide financial support consistent with its resources. (5) Assurance of adequate and stable financial support for capital outlay and for operating costs is an important factor.

Costs of plant construction differ considerably from one region of the nation to another, and from one community to another. The cost per student will vary according to size of enrollment. In general, the cost of the plant construction will range from $2, 500 to $4, 000 per student. Operating costs will vary inversely according to the size of the enrollment. When enrollments exceed 1, 000 students, costs begin to level off.

Per student cost in junior colleges in the South range from approximately $300 to $1,250. If an average salary of $7,200 is assumed and 10 per cent is added for instructional supplies, for a budget which allocates 60 per cent for instructional costs, an 18 to 1 student-teacher ratio will result in a per student cost of $733.

The act of the Assembly creating the Commission on Higher Education and defining its responsibilities embodies the concept of providing post-high school opportunities for all who desire them and can profit by them. There still remains the question of how far the State wishes to go in establishing community junior colleges in areas of limited population and resources with a view to rehabilitating or developing these areas.

The areas of the State where the largest increases in numbers of potential college students will be concentrated have been identified in a preceding section of the Report. Projected college enrollments derived from the college-age population data, by areas, are shown in Table 30. These projections were computed by noting that enrollments in Virginia institutions in 1964 were 30.2 per cent of the college-age population, assuming that this percentage will increase at an annual rate of 1.2, reaching 37.4 per cent in 1970; and that in 1970, 14.3 per cent (the national figure for percentage of college students who were enrolled in two-year institutions in the Fall of 1964) of students attending college in Virginia will be enrolled in two-year institutions. Since each area of the State would not have the same percentage of students going on to college, Table 31 is included to show for each area of the State the exact percentage of students who pursued post-high school education for the past three

Table 30. NUMBER OF HIGH SCHOOL GRADUATES IN 1964 AND ESTIMATED NUMBER OF PERSONS 18-21 YEARS OF AGE EXPECTED TO ATTEND TWO-YEAR COLLEGES IN 1970, FOR SUBREGIONS OF VIRGINIA.

Area[a]	Estimated Population 18-21 Years of Age, 1970	Number Expected to Attend Two-Year Colleges, 1970	Number of High School Graduates, 1964
1.A	49,163	2,630	7,177
1.B	44,311	2,370	4,742
1.C	17,336	927	2,570
1.D	41,077	2,198	4,735
1.1	2,587	138	503
1.2	9,218	493	1,204
1.3	2,587	138	281
1.4	2,652	142	511
1.5	2,814	151	442
1.6	8,248	441	876
1.7	5,078	272	721
1.8	10,253	549	813
1.9	13,326	713	930
2.1	10,415	557	1,534
2.2	13,908	744	1,684
3.1	6,630	355	863
3.2	11,482	614	1,331
4.1	12,323	659	1,284
4.2	7,116	381	820
4.3	21,444	1,147	2,386
5.1	3,655	196	544
5.2	14,231	761	1,894
5.3	13,584	727	2,043

[a] For specific areas included in each subregion, see map 3 page 108. The counties in each subregion are listed on page 2 of Staff Report #1 of the Virginia Higher Education Study Commission, January 1965.

Table 31. NUMBER AND PER CENT OF SECONDARY SCHOOL GRADUATES ENTERING POST SECONDARY INSTITUTIONS, BY COUNTIES AND INDEPENDENT CITIES, FALL OF 1962, 1963, and 1964.

Counties	Graduates Entering College Fall 1962[a]		Graduates Entering College, Trade Schools, and Business Schools Fall 1963[a]		Graduates Entering Post Secondary School Institutions Fall 1964[a]	
	Number	Per cent	Number	Per Cent	Number	Per Cent
Accomack	80	30	66	27	136	44
Albemarle	105	40	113	47	92	35
Alleghany	1	14	14	11	45	29
Amelia	19	22	22	27	36	40
Amherst	46	28	51	34	64	39
Appomattox	19	20	36	32	43	34
Arlington	1111	74	1270	85	1192	63
Augusta	89	23	72	68	210	47
Bath	18	30	14	25	20	39
Bedford	70	24	98	37	107	34
Bland	7	11	18	26	20	28
Botetourt	45	31	58	36	74	40
Brunswick	65	37	76	36	73	40
Buchanan	66	22	82	31	102	32
Buckingham	17	14	22	24	33	29
Campbell	96	33	121	39	124	36
Caroline	26	19	45	31	71	47
Carroll	37	24	64	38	82	42
Charles City	7	15	22	38	21	42
Charlotte	32	23	38	29	43	34
Chesterfield	229	40	339	57	372	51
Clarke	20	29	37	49	54	54
Craig	5	28	9	32	11	37
Culpeper	48	30	56	38	49	36
Cumberland	16	24	18	30	15	20
Dickenson	50	20	66	32	66	27
Dinwiddie	42	28	48	36	69	46
Essex	7	35	30	54	30	42
Fairfax	1708	62	1981	66	3126	75
Fauquier	39	25	57	36	99	50
Floyd	19	18	38	34	52	44

Table 31. CONTINUED.

Counties	Graduates Entering College Fall 1962[a]		Graduates Entering College, Trade Schools, and Business Schools Fall 1963[a]		Graduates Entering Post Secondary School Institutions Fall 1964[a]	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Fluvanna	15	29	28	38	59	50
Franklin	55	29	78	34	74	27
Frederick	40	23	62	38	59	32
Giles	51	19	71	27	89	34
Gloucester	27	23	38	36	50	45
Goochland	12	21	15	19	24	27
Grayson	19	17	29	29	37	33
Greene	7	19	15	44	7	23
Greensville	35	27	37	28	53	37
Halifax	106	28	137	34	135	30
Hanover	84	34	114	43	132	40
Henrico	542	52	649	57	900	70
Henry	109	30	116	28	127	33
Highland	7	21	5	23	4	22
Isle of Wight	60	35	74	49	55	33
King George	28	42	33	42	44	52
King and Queen	13	15	23	27	22	25
King William	36	40	30	43	40	39
Lancaster	22	27	28	31	44	49
Lee	64	25	78	28	109	35
Loudoun	49	25	80	33	116	48
Louisa	23	22	27	23	28	28
Lunenburg	30	22	51	36	49	35
Madison	14	32	14	30	11	22
Mathews	15	25	40	55	33	42
Mecklenburg	93	26	124	32	171	44
Middlesex	24	28	24	35	59	75
Montgomery	108	32	123	42	140	38
Nansemond	87	41	124	50	122	43
Nelson	27	25	24	19	6	20
New Kent	15	33	12	31	23	50
Northampton	61	35	63	40	63	32

Table 31. CONTINUED.

Counties	Graduates Entering College Fall 1962[a]		Graduates Entering College, Trade Schools, and Business Schools Fall 1963[a]		Graduates Entering Post Secondary School Institutions Fall 1964[a]	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Northumberland	23	24	33	39	43	36
Nottoway	52	37	75	47	76	43
Orange	25	30	52	67	79	71
Page	27	21	46	31	53	36
Patrick	28	18	47	30	65	41
Pittsylvania	153	25	304	53	257	44
Powhatan	16	30	19	39	14	45
Prince Edward	-	-	-	-	53	58
Prince George	42	32	62	48	113	59
Prince William	88	31	144	46	189	48
Pulaski	108	33	118	43	132	44
Rappahannock	9	24	9	18	14	42
Richmond	8	13	23	33	28	42
Roanoke	245	46	306	55	317	57
Rockbridge	64	34	90	54	85	53
Rockingham	91	28	113	34	148	44
Russell	79	29	81	32	75	32
Scott	53	19	67	24	72	26
Shenandoah	57	26	76	31	141	39
Smyth	47	25	142	49	117	36
Southampton	90	41	69	32	62	29
Spotsylvania	25	24	27	23	34	27
Stafford	17	15	32	22	44	29
Surry	13	21	12	21	14	34
Sussex	52	39	40	40	57	42
Tazewell	15	17	166	37	164	37
Warren	35	38	33	42	112	83
Washington	36	36	125	42	174	47
Westmoreland	31	27	28	31	42	36
Wise	126	29	173	41	166	36
Wythe	70	29	63	32	98	41
York	88	42	135	56	148	49

Table 31. CONTINUED.

Independent Cities	Graduates Entering College Fall 1962[a]		Graduates Entering College, Trade Schools, and Business Schools Fall 1963[a]		Graduates Entering Post Secondary School Institutions Fall 1964[a]	
	Number	Per Cent	Number	Per Cent	Number	Per Cent
Alexandria	357	53	343	49	650	66
Bristol	74	39	94	52	106	54
Buena Vista	10	22	13	23	21	38
Charlottesville	64	59	90	63	167	66
Chesapeake	341	42	467	50	490	56
Clifton Forge	23	43	37	60	44	64
Colonial Heights	40	43	57	60	61	53
Covington	24	46	68	51	42	43
Danville	174	47	163	48	251	56
Falls Church	86	75	80	71	4932	69
Franklin	-	-	38	47	85	45
Fredericksburg	57	56	74	58	86	72
Galax	35	27	34	44	58	52
Hampton	465	60	522	64	513	53
Harrisonburg	48	58	46	46	80	55
Hopewell	47	26	72	41	96	47
Lynchburg	243	57	258	62	336	71
Martinsville	104	49	110	49	125	50
Newport News	412	38	540	48	569	44
Norfolk	874	44	990	55	1268	66
Norton	20	34	16	57	30	66
Petersburg	150	46	148	53	160	52
Portsmouth	410	51	365	46	497	54
Radford	57	66	46	65	48	62
Richmond	736	49	710	50	1046	60
Roanoke	386	49	433	53	440	54
Staunton	95	64	99	72	187	86
Suffolk	76	58	70	58	78	60
Virginia Beach	368	56	540	73	699	69
Waynesboro	77	51	75	55	144	74
Williamsburg	71	45	105	59	129	70
Winchester	59	47	58	44	84	51

[a] Data for each school year were collected on different bases.

years. Interpretation of the data in Table 30 should be considered in light of the information in Table 31. The data of Table 31 are not comparable from year to year, having been collected on different bases, as indicated in the column heads.

There are at present no institutions of higher education in Virginia which fill the role of a comprehensive community college as defined in this Report or as conceived by the Commission on Vocational Education (see page 97).

The establishment of a system of comprehenisve community colleges in Virginia should begin with the expansion, where appropriate, of existing state-controlled two-year colleges to include community service programs, vocational, technical, and adult education. This kind of expansion was indicated in the conclusion drawn by the Commission on Vocational Education which was quoted at the beginning of this section.

It is recognized that the conversion of all existing two-year state-controlled colleges to comprehensive community colleges may not be appropriate. At least one is located in an area where the population is too small to warrant the operation of a comprehensive community college. Certain other branch colleges are expecting shortly to become four-year degree-granting institutions. If this step is judged wise, such branches should not be converted to comprehensive community colleges; but probably the communities in which they are located will need a new comprehensive community college simultaneously with the development of the branch college into four-year degree-granting status. In one or two cases the presence of a privately controlled four-year college in the same community where a two-year branch is now operating would need to be taken into account in plans for the possible conversion of the branch into a comprehensive community college. Other considerations may obtain in the case of some other two-year branch colleges.

The actual identification of the areas where comprehensive community colleges should be located in Virginia is beyond the scope of the present analysis. A careful, intensive study of the entire State is necessary for such determination. The Board of Technical Education has been conducting such a study, with a view to determining the areas where technical colleges should be located. The data from that study would doubtless be very useful in developing a master plan for community college locations throughout the State.

Priorities in the establishment of new comprehensive community colleges will also constitute a problem. The existence of the already established new technical colleges, and of the two-year branch colleges, would seem to give high priority to those locations for the conversion of these institutions into comprehensive community colleges. Perhaps the most important consideration in determining priorities is the spirit within the community, and its expressed willingness to undertake the financial burden involved in the establishment and operation of the new institution. The presence of an existing four-year college, either publicly or privately controlled, would doubtless also have to be considered as a factor affecting the priority for the development of a new comprehensive community college.

A calculation of the actual number of comprehensive community colleges that would be needed to provide adequate and complete service to the population of Virginia is also beyond the scope of the present Report. The number could not be determined with any reasonable precision until a thorough investigation of the probable locations for such institutions is completed. One could hazard a guess that a complete system of comprehensive community colleges in Virginia would require from 20 to 30 such institutions. It may take many years to obtain relatively complete coverage of the State with community college services, but progress in this direction may come more rapidly than would be anticipated at present.

Detailed cost estimates of the comprehensive community college system in Virginia are also beyond the scope of the present Report. A rough calculation may be made, on the basis of some estimates. If it may be assumed that the typical community college will have 600 students when it reaches a saturation point, and that the cost per student will be about $800 per year, an annual operating budget for each institution of approximately half a million dollars will be required. Physical plant facilities, if built new, can be expected to average about $3,500 per student accommodated, so that an institution built to care for 600 students would require a building costing in the neighborhood of $2,000,000. Usually this capital outlay cost is spread over several years, with the initial building being extended as enrollments develop. Many comprehensive community colleges in other states have been started without any substantial capital outlay by using, at least temporarily, some building facilities already available.

Finally, the opportunities for close collaboration between the development of technical colleges and comprehensive community colleges should be stressed. Certainly the State should develop only one type of institution, not two. It is quite clear that the areas already identified for the location of technical colleges would be ideal for comprehensive community colleges. Wherever feasible, the vocational technical schools operated by local school systems should be incorporated into the comprehensive community college system, insofar as their programs of post-secondary level instruction are concerned.

The accomplishment of a state-wide system of comprehensive community colleges in Virginia seems to depend chiefly on solutions to problems of organization and finance. Experience in other states indicates that neither of these problems is insoluble.